

STIC Search Report Biotech-Chem Library

STIC Database Tracking Number

TO: Ralph J Gitomer Location: 3d65/3c18

Art Unit: 1655

Wednesday, August 03, 2005

Case Serial Number: 10/785042

From: Noble Jarrell

Location: Biotech-Chem Library

Rem 1B71

Phone: 272-2556

Noble.jarrell@uspto.gov

Searon Notes		
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(FILE 'HOME' ENTERED AT 10:29:56 ON 03 AUG 2005)

FILE 'HCAPLUS' ENTERED AT 10:30:03 ON 03 AUG 2005 L1 1 (US2004167214 OR US2002022245)/PN

FILE 'REGISTRY' ENTERED AT 10:31:10 ON 03 AUG 2005

FILE 'HCAPLUS' ENTERED AT 10:31:12 ON 03 AUG 2005 L2 TRA L1 1- RN : 3 TERMS

FILE 'REGISTRY' ENTERED AT 10:31:12 ON 03 AUG 2005 L3 3 SEA L2

FILE 'WPIX' ENTERED AT 10:31:14 ON 03 AUG 2005 L4

=> b hcap FILE 'HCAPLUS' ENTERED AT 10:31:32 ON 03 AUG 2005 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2005 AMERICAN CHEMICAL SOCIETY (ACS)

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FILE COVERS 1907 - 3 Aug 2005 VOL 143 ISS 6 FILE LAST UPDATED: 2 Aug 2005 (20050802/ED)

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This file contains CAS Registry Numbers for easy and accurate substance identification.

=> d all 11

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L1 ANSWER 1 OF 1 HCAPLUS COPYRIGHT 2005 ACS on STN
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AN 2002:89890 HCAPLUS

DN 136:129027

ED Entered STN: 01 Feb 2002

TI Drug screening method for the treatment and prophylaxis of obesity

IN Hebebrand, Johannes; Antel, Jochen; Preuschoff, Ulf; David, Samuel; Sann, Holger; Weske, Michael

PA Solvay Pharmaceuticals G.m.b.H., Germany

SO PCT Int. Appl., 27 pp.

CODEN: PIXXD2

DT Patent

LA German

IC ICM A61P001-00

ICS G01N033-50

CC 1-1 (Pharmacology)

FAN.CNT 1

PATENT NO. DATE KIND APPLICATION NO. _____ _ _ _ _ -----------------20020131 WO 2001-EP8051 20010712 рт WO 2002007821 **A**1 W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM,

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HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS,
             LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO,
             RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
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    US 2002022245
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                                20000721
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CLASS
                 CLASS PATENT FAMILY CLASSIFICATION CODES
 PATENT NO.
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 WO 2002007821
                 ICM
                        A61P001-00
                        G01N033-50
                 ICS
 WO 2002007821
                        C12Q001/527
                 ECLA
 DE 10035227
                 ECLA
                        C120001/527
                        2G045/BB01; 2G045/BB51; 2G045/CB01; 2G045/FB01;
 JP 2004504053
                 FTERM
                        2G045/FB08; 4B063/QA01; 4B063/QA05; 4B063/QA18;
                        4B063/QQ08; 4B063/QR18; 4B063/QR77; 4B063/QS36; 4B063/QX07; 4C084/AA17; 4C084/NA14; 4C084/ZA702
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 US 2002022245
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                        C12Q001/527
                 ECLA
 US 2004167213
                 NCL
                        514/517.000
                 ECLA
                        C12Q001/527
 US 2004167214
                        514/517.000
                 NCL
                        C12Q001/527
                 ECLA
AB
     The invention relates to a method for screening compds. that can be used
     for the treatment and prophylaxis of obesity; the ability of the screened
     compds. to inhibit de novo lipogenesis in mammals and humans is determined
     Also disclosed is the use of compds. which are capable of inhibiting de
     novo lipogenesis in mammals in the production of drugs for the treatment
     and/or prophylaxis of obesity. Compds. that inhibit carboanhydrase
     subtypes II and V are selected by using adipocytes, hepatocytes or
     genetically produced enzymes. Selected compds. are also tested for
     anticonvulsant activity. Expts. with topiramate are reported.
ST
     drug screening obesity lipogenesis carboanhydrase inhibition topiramate
     antiobesity agent
IT
     Adipose tissue
        (adipocyte; drug screening method for treatment and prophylaxis of
        obesity)
ΙT
     Anticonvulsants
     Antiobesity agents
    Drug screening
    Human
    Obesity
        (drug screening method for treatment and prophylaxis of obesity)
ΙT
     Lipids, biological studies
     RL: PAC (Pharmacological activity); BIOL (Biological study)
```

(formation of; drug screening method for treatment and prophylaxis of obesity)

IT Liver

(hepatocyte; drug screening method for treatment and prophylaxis of obesity)

IT 452-35-7, Ethoxzolamide 97240-79-4, Topiramate

RL: PAC (Pharmacological activity); BIOL (Biological study)

(drug screening method for treatment and prophylaxis of obesity)

IT 9001-03-0, Dehydratase, carbonate

RL: BSU (Biological study, unclassified); BIOL (Biological study) (inhibition of; drug screening method for treatment and prophylaxis of obesity)

RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD

- (1) Genentech Inc; WO 9409813 A 1994 HCAPLUS
- (2) Hellerstein, M; EUROPEAN JOURNAL OF CLINICAL NUTRITION 1999, V53(1), P53
- (3) Supuran, C; EXPERT OPINION ON THERAPEUTIC PATENTS V10(5), P575 HCAPLUS

=> b reg

FILE 'REGISTRY' ENTERED AT 10:31:40 ON 03 AUG 2005 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2005 American Chemical Society (ACS)

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 2 AUG 2005 HIGHEST RN 857941-82-3 DICTIONARY FILE UPDATES: 2 AUG 2005 HIGHEST RN 857941-82-3

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TSCA INFORMATION NOW CURRENT THROUGH JANUARY 18, 2005

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Structure search iteration limits have been increased. See HELP SLIMITS for details.

Experimental and calculated property data are now available. For more information enter HELP PROP at an arrow prompt in the file or refer to the file summary sheet on the web at: http://www.cas.org/ONLINE/DBSS/registryss.html

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- L3 ANSWER 1 OF 3 REGISTRY COPYRIGHT 2005 ACS on STN
- RN 97240-79-4 REGISTRY
- ED Entered STN: 21 Jul 1985
- CN β-D-Fructopyranose, 2,3:4,5-bis-O-(1-methylethylidene)-, sulfamate (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 5H-Bis[1,3]dioxolo[4,5-b:4',5'-d]pyran, $\beta-D-fructopyranose$ deriv. OTHER NAMES:

```
2,3:4,5-Bis-O-(1-methylethylidene) \( \beta - D - \text{fructopyranose sulfamate} \)
CN
CN
     McN 4853
     RWJ 17021
CN
     Topamax
CN
     Topiramate
CN
CN
     Topomax
FS
     STEREOSEARCH
     C12 H21 N O8 S
MF
CI
     COM
                   ADISINSIGHT, ADISNEWS, AGRICOLA, ANABSTR, BEILSTEIN*,
LC
       BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CANCERLIT, CAPLUS, CASREACT, CBNB,
       CEN, CHEMCATS, CIN, CSCHEM, DDFU, DIOGENES, DRUGU, EMBASE, IMSDRUGNEWS,
       IMSPATENTS, IMSRESEARCH, IPA, MEDLINE, MRCK*, PATDPASPC, PHAR, PROMT,
       PROUSDDR, PS, RTECS*, SYNTHLINE, TOXCENTER, USAN, USPATZ, USPATFULL
         (*File contains numerically searchable property data)
     Other Sources:
                       WHO
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Absolute stereochemistry. Rotation (-).

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

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686 REFERENCES IN FILE CA (1907 TO DATE)
               13 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
              692 REFERENCES IN FILE CAPLUS (1907 TO DATE)
     ANSWER 2 OF 3 REGISTRY COPYRIGHT 2005 ACS on STN
L3
     9001-03-0 REGISTRY
RN
ED
     Entered STN: 16 Nov 1984
     Dehydratase, carbonate (9CI) (CA INDEX NAME)
CN
OTHER NAMES:
CN
     Anhydrase
     Carbonate anhydrase
CN
     Carbonate dehydratase
CN
CN
     Carbonic acid anhydrase
     Carbonic anhydrase
CN
     Carboxyanhydrase
CN
     E.C. 4.2.1.1
CN
DR
     9044-52-4, 9052-41-9
MF
     Unspecified
CI
     MAN
                   ADISNEWS, AGRICOLA, ANABSTR, BIOBUSINESS, BIOSIS, BIOTECHNO,
LC
       CA, CABA, CAPLUS, CASREACT, CEN, CHEMCATS, CHEMINFORMRX, CHEMLIST, CIN,
       CSCHEM, DDFU, DRUGU, EMBASE, IFICDB, IFIPAT, IFIUDB, IPA, MEDLINE, MRCK*, MSDS-OHS, NAPRALERT, NIOSHTIC, PROMT, TOXCENTER, USPAT2,
       USPATFULL
         (*File contains numerically searchable property data)
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     Other Sources:
         (**Enter CHEMLIST File for up-to-date regulatory information)
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*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

9515 REFERENCES IN FILE CA (1907 TO DATE) 314 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA 9530 REFERENCES IN FILE CAPLUS (1907 TO DATE)

- L3 ANSWER 3 OF 3 REGISTRY COPYRIGHT 2005 ACS on STN
- RN 452-35-7 REGISTRY
- ED Entered STN: 16 Nov 1984
- CN 2-Benzothiazolesulfonamide, 6-ethoxy- (6CI, 7CI, 8CI, 9CI) (CA INDEX NAME)

OTHER NAMES:

- CN 6-Ethoxy-2-benzothiazolesulfonamide
- CN Cardrase
- CN Diuretic C
- CN Ethamide
- CN Ethoxyzolamide
- CN Ethoxzolamide
- CN Etoxzolamide
- CN Glaucotensil
- CN L 643786
- CN NSC 10679
- CN PNU 4191
- CN Redupresin
- CN U 4191
- FS 3D CONCORD
- MF C9 H10 N2 O3 S2
- CI COM
- LC STN Files: AGRICOLA, ANABSTR, BEILSTEIN*, BIOBUSINESS, BIOSIS,
 BIOTECHNO, CA, CANCERLIT, CAOLD, CAPLUS, CASREACT, CHEMCATS, CHEMLIST,
 CSCHEM, DDFU, DIOGENES, DRUGU, EMBASE, HODOC*, HSDB*, IFICDB, IFIPAT,
 IFIUDB, IPA, MEDLINE, MRCK*, PS, RTECS*, TOXCENTER, USAN, USPAT2,
 USPATFULL
 - (*File contains numerically searchable property data)
 Other Sources: EINECS**
 - (**Enter CHEMLIST File for up-to-date regulatory information)

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

- 272 REFERENCES IN FILE CA (1907 TO DATE)
- 10 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
- 272 REFERENCES IN FILE CAPLUS (1907 TO DATE)
- 23 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

=> b wpix

FILE 'WPIX' ENTERED AT 10:31:45 ON 03 AUG 2005 COPYRIGHT (C) 2005 THE THOMSON CORPORATION

FILE LAST UPDATED: 2 AUG 2005 <20050802/UP>
MOST RECENT DERWENT UPDATE: 200549 <200549/DW>
DERWENT WORLD PATENTS INDEX SUBSCRIBER FILE, COVERS 1963 TO DATE

>>> FOR A COPY OF THE DERWENT WORLD PATENTS INDEX STN USER GUIDE, PLEASE VISIT:

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http://www.stn-international.de/training center/patents/stn guide.pdf <<<
>>> FOR DETAILS OF THE PATENTS COVERED IN CURRENT UPDATES, SEE
    http://thomsonderwent.com/coverage/latestupdates/
>>> FOR INFORMATION ON ALL DERWENT WORLD PATENTS INDEX USER
    GUIDES, PLEASE VISIT:
    http://thomsonderwent.com/support/userguides/
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>>> NEW! FAST-ALERTING ACCESS TO NEWLY-PUBLISHED PATENT
    DOCUMENTATION NOW AVAILABLE IN DERWENT WORLD PATENTS INDEX
    FIRST VIEW - FILE WPIFV.
    FOR FURTHER DETAILS: http://www.thomsonderwent.com/dwpifv <<<
>>> THE CPI AND EPI MANUAL CODES HAVE BEEN REVISED FROM UPDATE 200501.
    PLEASE CHECK:
http://thomsonderwent.com/support/dwpiref/reftools/classification/code-revision/
    FOR DETAILS. <<<
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DNC C2002-056198
     Selection and use of lipogenesis inhibitors for the treatment and
     prevention of obesity.
DC
     B05
     ANTEL, J; DAVID, S; HEBEBRAND, J; PREUSCHOFF, U; SANN, H; WESKE, M
IN
     (SOLV) SOLVAY PHARM GMBH; (ANTE-I) ANTEL J; (DAVI-I) DAVID S; (HEBE-I)
PA
     HEBEBRAND J; (PREU-I) PREUSCHOFF U; (SANN-I) SANN H; (WESK-I) WESKE M
CYC
    97
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    NOVELTY - Compounds for the treatment and/or prevention of obesity are
     selected on the basis of their capability to inhibit de novo lipogenesis
          DETAILED DESCRIPTION - An INDEPENDENT CLAIM is also included for the
     use of compounds which are capable of inhibiting de novo lipogenesis in
    mammals and which have no anticonvulsant activity for the production of a
     medicament for the treatment and/or prevention of obesity.
          ACTIVITY - Anorectic.
          MECHANISM OF ACTION - Lipogenesis inhibitor; Carboanhydrase
     inhibitor.
          No biological data given.
          USE - For the treatment and prevention of obesity (claimed).
          ADVANTAGE - The method is simple, rapid and avoids protracted and
     expensive in vivo tests, including feeding experiments on animals.
     Dwg.0/0
    CPI
    AB
     CPI: B11-C08E3; B12-K04A; B14-E12
=> b home
FILE 'HOME' ENTERED AT 10:31:53 ON 03 AUG 2005
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AB

FS

FΑ

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=> d his full
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L2

L5

L16

T₁23

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(FILE 'HOME' ENTERED AT 10:29:56 ON 03 AUG 2005)
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FILE 'HCAPLUS' ENTERED AT 10:30:03 ON 03 AUG 2005
L1 1 SEA ABB=ON PLU=ON (US2004167214 OR US2002022245)/PN

FILE 'REGISTRY' ENTERED AT 10:31:10 ON 03 AUG 2005

FILE 'HCAPLUS' ENTERED AT 10:31:12 ON 03 AUG 2005 TRA L1 1- RN : 3 TERMS

FILE 'REGISTRY' ENTERED AT 10:31:12 ON 03 AUG 2005 L3 3 SEA ABB=ON PLU=ON L2

FILE 'WPIX' ENTERED AT 10:31:14 ON 03 AUG 2005
L4 1 SEA ABB=ON PLU=ON (US2004167214 OR US2002022245)/PN

FILE 'HCAPLUS' ENTERED AT 10:35:58 ON 03 AUG 2005 E ADIPOSE TISSUE/CT

E E3+ALL

41716 SEA ABB=ON PLU=ON ADIPOSE TISSUE+NT/CT

E E13+ALL

L6 23346 SEA ABB=ON PLU=ON OBESITY+NT/CT

E E7+ALL

L7 6210 SEA ABB=ON PLU=ON ANTIOBESITY AGENTS+OLD/CT

E APPETITE/CT E E3A+LL

E APPETITE/CT

E E3+ALL

L8 15243 SEA ABB=ON PLU=ON APPETITE+NT/CT

E APPETITE DEPRESSANTS/CT

E E3+ALL

L9 2373 SEA ABB=ON PLU=ON APPETITE DEPRESSANTS+OLD/CT

E BODY WEIGHT/CT

E E3+ALL

L10 19434 SEA ABB=ON PLU=ON BODY WEIGHT/CT

E LIPIDS/CT E E3+OLD.NT1

L11 QUE ABB=ON PLU=ON LIPIDS+OLD,NT1/CT

L12 152074 SEA ABB=ON PLU=ON LIPID#/CW

L13 31294 SEA ABB=ON PLU=ON (L11 OR L12) (L) FORMAT?

E LIPOGENESIS/CT

L14 4657 SEA ABB=ON PLU=ON LIPOGENES?

L15 34708 SEA ABB=ON PLU=ON DRUG SCREENING+OLD/CT

28 SEA ABB=ON PLU=ON L15 AND (L13 OR L14)

L17 19 SEA ABB=ON PLU=ON L16 AND (L5 OR L6 OR L7 OR L8 OR L9 OR L10)

L18 17 SEA ABB=ON PLU=ON L17 AND (?INHIBIT? OR ?MODULAT? OR ?BLOCK? OR ?PREVENT? OR ANTAGON?)

L19 QUE ABB=ON PLU=ON PY<=2001 OR AY<=2001 OR PRY<=2001 OR PD<20010718 OR AD<20010718 OR PRD<20010718

L20 12 SEA ABB=ON PLU=ON L18 AND L19

E HEBEBRAND J/AU

L21 96 SEA ABB=ON PLU=ON ("HEBEBRAND J"/AU OR "HEBEBRAND JOHANNES"/A

E ANTEL J/AU

L22 83 SEA ABB=ON PLU=ON ("ANTEL J"/AU OR "ANTEL J P"/AU OR "ANTEL

JOCHEN"/AU) E PREUSCHOFF U/AU

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L24 247 SEA ABB=ON PLU=ON ("SANN H"/AU OR "SANN H J"/AU OR "SANN

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L25 8 SEA ABB=ON PLU=ON ("WESKE M"/AU OR "WESKE MICHAEL"/AU)

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L26
L27
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L30
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L34
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L37
L38
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L39
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L45
=> b hcap
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FILE COVERS 1907 - 3 Aug 2005 VOL 143 ISS 6 FILE LAST UPDATED: 2 Aug 2005 (20050802/ED)

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This file contains CAS Registry Numbers for easy and accurate substance identification.

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    Drug screening method for the treatment and prophylaxis of obesity
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    Hebebrand, Johannes; Antel, Jochen; Preuschoff,
    Ulf; David, Samuel; Sann, Holger; Weske, Michael
    Solvay Pharmaceuticals G.m.b.H., Germany
PΑ
SO
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AΒ
     The invention relates to a method for screening compds. that can be used
     for the treatment and prophylaxis of obesity; the ability of the screened
     compds. to inhibit de novo lipogenesis in mammals and
     humans is determined Also disclosed is the use of compds. which are capable of
     inhibiting de novo lipogenesis in mammals in the production
     of drugs for the treatment and/or prophylaxis of obesity.
     inhibit carboanhydrase subtypes II and V are selected by
     using adipocytes, hepatocytes or genetically produced enzymes. Selected
     compds. are also tested for anticonvulsant activity. Expts. with
     topiramate are reported.
ST
     drug screening obesity lipogenesis carboanhydrase
     inhibition topiramate antiobesity agent
IT
     Adipose tissue
        adipocyte; drug screening method for treatment and prophylaxis of
        obesity)
IT
     Anticonvulsants
       Antiobesity agents
       Drug screening
     Human
       Obesity
        (drug screening method for treatment and prophylaxis of obesity)
     Lipids, biological studies
IT
     RL: PAC (Pharmacological activity); BIOL (Biological study)
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        prophylaxis of obesity)
IT
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TT
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TΤ
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RE.CNT
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(1) Genentech Inc; WO 9409813 A 1994 HCAPLUS
(2) Hellerstein, M; EUROPEAN JOURNAL OF CLINICAL NUTRITION 1999, V53(1), P53
(3) Supuran, C; EXPERT OPINION ON THERAPEUTIC PATENTS V10(5), P575 HCAPLUS
=> d all hitstr 145 tot
L45 ANSWER 1 OF 11 HCAPLUS COPYRIGHT 2005 ACS on STN
     2005:99131 HCAPLUS
AN
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     Protein and cDNA sequences for human fibroblast growth factor-19 (FGF19)
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     Adams, Sean; Goddard, Audrey; Gurney, Austin L.; John, Linu; Stewart,
ΤN
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     Genentech, Inc., USA
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     U.S. Pat. Appl. Publ., 79 pp., Cont.-in-part of U.S. Ser. No. 712,560.
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                        530/350.000; 536/023.200
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US 2003144498
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                        435/006.000; 435/069.100; 435/320.100; 435/325.000;
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US 2004258710
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536/023.700; 530/351.000
                 ECLA
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 US 2005153396
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                        530/350.000; 530/388.100; 536/023.200
435/006.000; 435/007.230
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 US 2005164266
                 NCL
 US 2005136515
                 NCL
                        435/069.100; 435/183.000; 435/320.100; 435/325.000;
                        530/350.000; 530/388.100; 536/023.200
                 ECLA
                        C07K014/47
 US 2005136475
                 NCL
                        435/006.000
                        C07K014/47; C07K014/705
                 ECLA
                        435/069.100; 435/183.000; 435/320.100; 435/325.000;
 US 2005158830
                 NCL
                        530/350.000; 530/388.100; 536/023.200
    The present invention provides protein and cDNA sequences for human
     fibroblast growth factor-19 (FGF-19). Also provided herein are vectors
     and host cells comprising those nucleic acid sequences, chimeric
     polypeptide mols. comprising the polypeptides of the present invention
     fused to heterologous polypeptide sequences, antibodies which bind to the
    polypeptides of the present invention and to methods for producing the
    polypeptides of the present invention. Furthermore, methods of treating
     obesity are provided. It was demonstrated that administration of
     recombinant FGF-19 leads to increase in food uptake and oxygen
     consumption, as well as in leptin release from adipocytes in mice. FGF-19
     transgenic mice had decreased triglycerides and free fatty acids levels,
     and decreased glucose uptake by adipocytes. It was also demonstrated,
     that FGF-19 transgenic mice have improved glucose tolerance and insulin
     sensitivity. It was shown, that the effects of FGF-19 on the expression
    of cholesterol-modifying enzymes is FGFR4 dependent, and FGFR4 is not the
    only functional receptor for FGF-19. Also it was shown, that treatment
    with FGF-19 reverse diet induced insulin resistance.
    protein cDNA sequence human FGF19 obesity insulin resistance treatment;
ST
    human fibroblast growth factor 19 FGFR4 antiobesity antidiabetic
IT
    Gene, animal
    RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (ACC2, lipogenesis modulating via; protein and cDNA sequences for human
        fibroblast growth factor-19 (FGF19) and methods of using FGF19 and
        FGFR4 for treatment of obesity and related disorders)
IT
    Gene, animal
    RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (FGFR4, expression modulation; protein and cDNA sequences for human
        fibroblast growth factor-19 (FGF19) and methods of using FGF19 and
        FGFR4 for treatment of obesity and related disorders)
TΤ
    Gene, animal
    RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (PPARy, lipogenesis modulating via; protein and cDNA sequences
        for human fibroblast growth factor-19 (FGF19) and methods of using
        FGF19 and FGFR4 for treatment of obesity and related disorders)
ΤТ
    Drug delivery systems
        (carriers; protein and cDNA sequences for human fibroblast growth
        factor-19 (FGF19) and methods of using FGF19 and FGFR4 for treatment of
        obesity and related disorders)
    Lipids, biological studies
     RL: BSU (Biological study, unclassified); BIOL (Biological study)
        (lipogenesis, modulating; protein and cDNA sequences for human
        fibroblast growth factor-19 (FGF19) and methods of using FGF19 and
        FGFR4 for treatment of obesity and related disorders)
IT
    Diabetes mellitus
        (non-insulin-dependent; protein and cDNA sequences for human fibroblast
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growth factor-19 (FGF19) and methods of using FGF19 and FGFR4 for

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treatment of obesity and related disorders)
ΤТ
    Antidiabetic agents
    Antiobesity agents
     Drug design
    Drug screening
    Gene therapy
    Human
    Molecular cloning
     Obesity
     Protein sequences
     cDNA sequences
        (protein and cDNA sequences for human fibroblast growth factor-19
        (FGF19) and methods of using FGF19 and FGFR4 for treatment of obesity
        and related disorders)
TТ
    Gene, animal
     RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (scd1, lipogenesis modulating via; protein and cDNA sequences for human
        fibroblast growth factor-19 (FGF19) and methods of using FGF19 and
        FGFR4 for treatment of obesity and related disorders)
     Fibroblast growth factor receptors
TT
     RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (type 4, modulators; protein and cDNA sequences for human fibroblast
        growth factor-19 (FGF19) and methods of using FGF19 and FGFR4 for
        treatment of obesity and related disorders)
     Peroxisome proliferator-activated receptors
IT
    RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (\gamma, PPAR\gamma, lipogenesis modulating via; protein and cDNA
        sequences for human fibroblast growth factor-19 (FGF19) and methods of
        using FGF19 and FGFR4 for treatment of obesity and related disorders)
     834926-18-0
TΨ
    RL: BSU (Biological study, unclassified); PRP (Properties); THU
     (Therapeutic use); BIOL (Biological study); USES (Uses)
        (amino acid sequence; protein and cDNA sequences for human fibroblast
        growth factor-19 (FGF19) and methods of using FGF19 and FGFR4 for
        treatment of obesity and related disorders)
    9023-93-2, Acetyl-CoA carboxylase
TΤ
     RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (gene ACC2, lipogenesis modulating via; protein and cDNA sequences for
        human fibroblast growth factor-19 (FGF19) and methods of using FGF19
        and FGFR4 for treatment of obesity and related disorders)
IT
    9014-34-0, Stearoyl-CoA desaturase
     RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (gene SCD1, lipogenesis modulating via; protein and cDNA sequences for
        human fibroblast growth factor-19 (FGF19) and methods of using FGF19
        and FGFR4 for treatment of obesity and related disorders)
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    RL: BSU (Biological study, unclassified); PRP (Properties); THU
     (Therapeutic use); BIOL (Biological study); USES (Uses)
        (nucleotide sequence; protein and cDNA sequences for human fibroblast
        growth factor-19 (FGF19) and methods of using FGF19 and FGFR4 for
        treatment of obesity and related disorders)
TТ
     186287-16-1, GENBANK AA220994
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     RL: BSU (Biological study, unclassified); PRP (Properties); BIOL
     (Biological study)
        (protein and cDNA sequences for human fibroblast growth factor-19
        (FGF19) and methods of using FGF19 and FGFR4 for treatment of obesity
        and related disorders)
IT
     223121-69-5, Fibroblast growth factor 19
    RL: BSU (Biological study, unclassified); PRP (Properties); THU
     (Therapeutic use); BIOL (Biological study); USES (Uses)
        (protein and cDNA sequences for human fibroblast growth factor-19
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(FGF19) and methods of using FGF19 and FGFR4 for treatment of obesity
          and related disorders)
      9004-10-8, Insulin, biological studies RL: BSU (Biological study, unclassified); BIOL (Biological study)
 ΙT
          (resistance, preventing; protein and cDNA sequences for human
          fibroblast growth factor-19 (FGF19) and methods of using FGF19 and
          FGFR4 for treatment of obesity and related disorders)
      834928-80-2 834928-81-3 834928-82-4 834928-83-5
834928-85-7 834928-86-8 834928-87-9 834928-88-0
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      834928-95-9
                     834928-96-0
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      RL: PRP (Properties)
          (unclaimed nucleotide sequence; protein and cDNA sequences for human
          fibroblast growth factor-19 (FGF19) and methods of using FGF19 and
          FGFR4 for the treatment of obesity and related disorders)
 L45 ANSWER 2 OF 11 HCAPLUS COPYRIGHT 2005 ACS on STN
      2004:101274 HCAPLUS
 AN
      140:158645
 DN
 ED
      Entered STN: 08 Feb 2004
      Genes overexpressed in adipocytes and their use in diagnosis and treatment
 ΤI
      of adipose tissue disorders
      Chada, Kiran; Chouinard, Roland; Ashar, Hena; Sayed, Abu M. D.
 IN
      Hmgene, Inc., USA
 PA
 SO
      PCT Int. Appl., 91 pp.
      CODEN: PIXXD2
 DT
      Patent
      English
- T.A
      ICM C12N
 IC
      3-3 (Biochemical Genetics)
 CC
      Section cross-reference(s): 1, 9, 14
 FAN.CNT 2
      PATENT NO.
                            KIND DATE
                                                APPLICATION NO.
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                                    20040205 WO 2003-US23684
      WO 2004011618
                            A2
                                                                         20030729
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          W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
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               FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR,
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                                  20020729
 PRAI US 2002-398785P
                             Ρ
      US 2003-478206P
                             P
                                    20030612
 CLASS
                  CLASS PATENT FAMILY CLASSIFICATION CODES
  PATENT NO.
  _____
  WO 2004011618 ICM
                           C12N
                           C07K014/47; C07K014/72; C12N009/00; C12Q001/68M6
  WO 2004011618 ECLA
      Disclosed is a method of identifying genes that are over-expressed in
      adipose tissue as compared to pre-adipocyte tissue or other tissues,
      comprising performing differential gene expression anal. between the white
      adipose tissue (WAT) or stromal vascular tissue (SVT) from any two
      different mice selected from the group consisting of wild-type, HMGI-C
      -/-, ob/ob, and HMGI-C-/- ob/ob genotype mice. Based on this differential
      gene expression anal. using the Affymetrix GeneChip MG-U74, a number of
      nucleotide sequences are identified whose expression is
      adipocyte-specific. A preferred embodiment of the invention is expression
      of the sFRP-5 (secreted frizzled-related protein 5) and npr-3 (natriuretic
      peptide receptor C) genes. The identified nucleotide sequences and their
      corresponding polypeptides may then be used to prevent
      adipogenesis, to treat diabetes, and to screen for small mols. that can
      modulate or prevent adipogenesis and to treat diabetes
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and obesity.
ST
     gene expression profile adipocyte diagnosis therapy; adipose tissue
     disorder diagnosis therapy gene expression; sequence adipocyte specific
     cDNA protein mouse human
IT
     Syntaxins
     RL: BSU (Biological study, unclassified); DGN (Diagnostic use); PRP
     (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (1B, -like mol.; genes overexpressed in adipocytes and their use in
        diagnosis and treatment of adipose tissue disorders)
     DNA microarray technology
     Gene expression profiles, animal
        (Affymetrix MG-U74 GeneChip; genes overexpressed in adipocytes and
        their use in diagnosis and treatment of adipose tissue disorders)
ΤТ
     Proteins
     RL: BSU (Biological study, unclassified); DGN (Diagnostic use); PRP
     (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (Arl4; genes overexpressed in adipocytes and their use in diagnosis and
        treatment of adipose tissue disorders)
IT
     Chemokines
     RL: BSU (Biological study, unclassified); DGN (Diagnostic use); PRP
     (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (CCL17 (C-C motif ligand 17); genes overexpressed in adipocytes and
        their use in diagnosis and treatment of adipose tissue disorders)
     Chemokine receptors
     RL: BSU (Biological study, unclassified); DGN (Diagnostic use); PRP
     (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (CCR2; genes overexpressed in adipocytes and their use in diagnosis and
        treatment of adipose tissue disorders)
ΙT
     Chemokine receptors
     RL: BSU (Biological study, unclassified); DGN (Diagnostic use); PRP
     (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (CCR6; genes overexpressed in adipocytes and their use in diagnosis and
        treatment of adipose tissue disorders)
TΨ
     Antiqens
     RL: BSU (Biological study, unclassified); DGN (Diagnostic use); PRP
     (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (CD1d1; genes overexpressed in adipocytes and their use in diagnosis
        and treatment of adipose tissue disorders)
TΤ
     CD antigens
     RL: BSU (Biological study, unclassified); DGN (Diagnostic use); PRP
     (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (CD53; genes overexpressed in adipocytes and their use in diagnosis and
        treatment of adipose tissue disorders)
IT
     Proteins
     RL: BSU (Biological study, unclassified); DGN (Diagnostic use); PRP
     (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (FSP27; genes overexpressed in adipocytes and their use in diagnosis
        and treatment of adipose tissue disorders)
IT
     G protein-coupled receptors
     RL: BSU (Biological study, unclassified); DGN (Diagnostic use); PRP
     (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (GPR127; genes overexpressed in adipocytes and their use in diagnosis
        and treatment of adipose tissue disorders)
IT
     G protein-coupled receptors
     RL: BSU (Biological study, unclassified); DGN (Diagnostic use); PRP
     (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (GPR18; genes overexpressed in adipocytes and their use in diagnosis
        and treatment of adipose tissue disorders)
    G proteins (guanine nucleotide-binding proteins)
     RL: BSU (Biological study, unclassified); DGN (Diagnostic use); PRP
     (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (Gi (adenylate cyclase-inhibiting), α1-subunit; genes
        overexpressed in adipocytes and their use in diagnosis and treatment of
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RL: BSU (Biological study, unclassified); DGN (Diagnostic use); PRP

adipose tissue disorders)

G proteins (guanine nucleotide-binding proteins)

IT

(Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (G2; genes overexpressed in adipocytes and their use in diagnosis and treatment of adipose tissue disorders)

IT Transcription factors

RL: BSU (Biological study, unclassified); DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (IRF-4 (interferon regulatory factor 4); genes overexpressed in adipocytes and their use in diagnosis and treatment of adipose tissue disorders)

IT Proteins

RL: BSU (Biological study, unclassified); DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (Isg12; genes overexpressed in adipocytes and their use in diagnosis and treatment of adipose tissue disorders)

IT Transcription factors

RL: BSU (Biological study, unclassified); DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (KLF5 (Kruppel-like factor 5); genes overexpressed in adipocytes and their use in diagnosis and treatment of adipose tissue disorders)

IT Proteins

RL: BSU (Biological study, unclassified); DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (LBH (limb-bud and heart gene); genes overexpressed in adipocytes and their use in diagnosis and treatment of adipose tissue disorders)

IT Cyclins

RL: BSU (Biological study, unclassified); DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (M-3; genes overexpressed in adipocytes and their use in diagnosis and treatment of adipose tissue disorders)

IT Proteins

RL: BSU (Biological study, unclassified); DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (Peg1/MEST; genes overexpressed in adipocytes and their use in diagnosis and treatment of adipose tissue disorders)

IT Proteins

RL: BSU (Biological study, unclassified); DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (RELMα (resistin-like mol. α); genes overexpressed in adipocytes and their use in diagnosis and treatment of adipose tissue disorders)

IT Proteins

RL: BSU (Biological study, unclassified); DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (Ras protein p21ras activator 2; genes overexpressed in adipocytes and their use in diagnosis and treatment of adipose tissue disorders)

T Proteins

RL: BSU (Biological study, unclassified); DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (Ras-like GTPase TC10; genes overexpressed in adipocytes and their use in diagnosis and treatment of adipose tissue disorders)

IT Proteins

RL: BSU (Biological study, unclassified); DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (S3-12; genes overexpressed in adipocytes and their use in diagnosis and treatment of adipose tissue disorders)

IT Proteins

RL: BSU (Biological study, unclassified); DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (Vap-1; genes overexpressed in adipocytes and their use in diagnosis and treatment of adipose tissue disorders)

IT Adipose tissue

(adipocyte; genes overexpressed in adipocytes and their use in diagnosis and treatment of adipose tissue disorders)

IT Calcium-binding proteins

RL: BSU (Biological study, unclassified); DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

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(calgranulin B; genes overexpressed in adipocytes and their use in
        diagnosis and treatment of adipose tissue disorders)
IT
     Proteins
     RL: BSU (Biological study, unclassified); DGN (Diagnostic use); PRP
     (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (copine II; genes overexpressed in adipocytes and their use in
        diagnosis and treatment of adipose tissue disorders)
     Proteins
TТ
     RL: BSU (Biological study, unclassified); DGN (Diagnostic use); PRP
     (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (coronin; genes overexpressed in adipocytes and their use in diagnosis
        and treatment of adipose tissue disorders)
TΤ
     Proteins
     RL: BSU (Biological study, unclassified); DGN (Diagnostic use); PRP
     (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (decay accelerating factor 1; genes overexpressed in adipocytes and
        their use in diagnosis and treatment of adipose tissue disorders)
     Susceptibility (genetic)
ΙT
        (diagnosis of; genes overexpressed in adipocytes and their use in
        diagnosis and treatment of adipose tissue disorders)
     Transcription factors
IT
     RL: BSU (Biological study, unclassified); DGN (Diagnostic use); PRP
     (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (early B-cell factor; genes overexpressed in adipocytes and their use
        in diagnosis and treatment of adipose tissue disorders)
IT
     Bioassay
        (for agents preventing adipose accumulation; genes
        overexpressed in adipocytes and their use in diagnosis and treatment of
        adipose tissue disorders)
     High throughput screening
IT
        (for modulating agents; genes overexpressed in adipocytes and
        their use in diagnosis and treatment of adipose tissue disorders)
     Agglutinins and Lectins
ΤТ
     RL: BSU (Biological study, unclassified); DGN (Diagnostic use); PRP
     (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (galectin 12; genes overexpressed in adipocytes and their use in
        diagnosis and treatment of adipose tissue disorders)
     G proteins (guanine nucleotide-binding proteins)
TΤ
     RL: BSU (Biological study, unclassified); DGN (Diagnostic use); PRP
     (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (gene CDC42; genes overexpressed in adipocytes and their use in
        diagnosis and treatment of adipose tissue disorders)
TT
     Adipose tissue
     Angiogenesis
     Antidiabetic agents
       Antiobesity agents
     Diabetes mellitus
       Drug screening
     Human
     Mus
       Obesity
     Protein sequences
     Rattus
     cDNA sequences
        (genes overexpressed in adipocytes and their use in diagnosis and
        treatment of adipose tissue disorders)
IT
     Lactoferrins
     RANTES (chemokine)
     RL: BSU (Biological study, unclassified); DGN (Diagnostic use); PRP
     (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (genes overexpressed in adipocytes and their use in diagnosis and
        treatment of adipose tissue disorders)
ΙT
     Diagnosis
        (mol.; genes overexpressed in adipocytes and their use in diagnosis and
        treatment of adipose tissue disorders)
     Antibodies and Immunoglobulins
TT
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RL: DGN (Diagnostic use); THU (Therapeutic use); BIOL (Biological study);
     USES (Uses)
        (monoclonal; genes overexpressed in adipocytes and their use in
        diagnosis and treatment of adipose tissue disorders)
     Proteins
     RL: BSU (Biological study, unclassified); DGN (Diagnostic use); PRP
     (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (neuronatin; genes overexpressed in adipocytes and their use in
        diagnosis and treatment of adipose tissue disorders)
IT
     Adipose tissue
        (preadipocyte; genes overexpressed in adipocytes and their use in
        diagnosis and treatment of adipose tissue disorders)
ΙT
     RL: BSU (Biological study, unclassified); DGN (Diagnostic use); PRP
     (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (retinol-binding, 4; genes overexpressed in adipocytes and their use in
        diagnosis and treatment of adipose tissue disorders)
TΤ
     Hedgehog protein
     RL: BSU (Biological study, unclassified); DGN (Diagnostic use); PRP
     (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (sonic; genes overexpressed in adipocytes and their use in diagnosis
        and treatment of adipose tissue disorders)
ΙT
     Proteins
     RL: BSU (Biological study, unclassified); DGN (Diagnostic use); PRP
    (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (thyroid hormone-responsive SPOT14; genes overexpressed in adipocytes
        and their use in diagnosis and treatment of adipose tissue disorders)
IT
     G proteins (guanine nucleotide-binding proteins)
     RL: BSU (Biological study, unclassified); DGN (Diagnostic use); PRP
     (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (\alpha2-subunit; genes overexpressed in adipocytes and their use in
        diagnosis and treatment of adipose tissue disorders)
     78169-47-8, Aspartic proteinase
     RL: BSU (Biological study, unclassified); DGN (Diagnostic use); PRP
     (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (-like protein; genes overexpressed in adipocytes and their use in
        diagnosis and treatment of adipose tissue disorders)
ΤТ
     9001-03-0
     RL: BSU (Biological study, unclassified); DGN (Diagnostic use); PRP
     (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (II; genes overexpressed in adipocytes and their use in diagnosis and
        treatment of adipose tissue disorders)
ΙT
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     (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (amino acid sequence; genes overexpressed in adipocytes and their use
        in diagnosis and treatment of adipose tissue disorders)
IT
     9001-99-4, RNase
     RL: BSU (Biological study, unclassified); DGN (Diagnostic use); PRP
     (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (eosinophil-associated 1; genes overexpressed in adipocytes and their use
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in diagnosis and treatment of adipose tissue disorders)
                                 79747-53-8, Protein tyrosine phosphatase
    9003-99-0, Myeloperoxidase
TТ
    90698-32-1, Leukotriene C4 synthase
                                           128028-50-2, Proteinase 3
    146480-36-6, Matrix metalloproteinase 9
                                               216864-09-4, SYnuclein \gamma
    503473-02-7, Nitric oxide synthase 3
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        (genes overexpressed in adipocytes and their use in diagnosis and
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    RL: BSU (Biological study, unclassified); DGN (Diagnostic use); PRP
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        (nucleotide sequence; genes overexpressed in adipocytes and their use
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     (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (nucleotide sequence; genes overexpressed in adipocytes and their use
        in diagnosis and treatment of adipose tissue disorders)
ΙT
     9016-18-6, Carboxylesterase
     RL: BSU (Biological study, unclassified); DGN (Diagnostic use); PRP
     (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (p62/CE; genes overexpressed in adipocytes and their use in diagnosis
        and treatment of adipose tissue disorders)
TΥ
     140879-24-9, Proteasome
     RL: BSU (Biological study, unclassified); DGN (Diagnostic use); PRP
     (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (subunit β5; genes overexpressed in adipocytes and their use in
        diagnosis and treatment of adipose tissue disorders)
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IT
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     654306-92-0
     RL: PRP (Properties)
        (unclaimed protein sequence; genes overexpressed in adipocytes and
        their use in diagnosis and treatment of adipose tissue disorders)
ΙT
     9001-03-0
     RL: BSU (Biological study, unclassified); DGN (Diagnostic use); PRP
     (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (II; genes overexpressed in adipocytes and their use in diagnosis and
        treatment of adipose tissue disorders)
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ВN
     Dehydratase, carbonate (9CI) (CA INDEX NAME)
CN
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
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     RL: BSU (Biological study, unclassified); DGN (Diagnostic use); PRP
     (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (nucleotide sequence; genes overexpressed in adipocytes and their use
        in diagnosis and treatment of adipose tissue disorders)
RN
     654289-16-4 HCAPLUS
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CN
     cDNA plus flanks) (9CI) (CA INDEX NAME)
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
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     DNA (rat clone WO2004011618-SEQID-90 carbonate dehydratase isoenzyme II
CN
     cDNA plus flanks) (9CI) (CA INDEX NAME)
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
L45 ANSWER 3 OF 11 HCAPLUS COPYRIGHT 2005 ACS on STN
     2003:511950 HCAPLUS
AN
DN
     139:79155
    Entered STN: 04 Jul 2003
ED
     Carbohydrate response element-binding protein and uses thereof
ΤI
IN
     Uyeda, Kosaku
PA
     USA
    U.S. Pat. Appl. Publ., 64 pp.
SO
     CODEN: USXXCO
דת
    Patent
     English
LΑ
     ICM A61K031-00
     ICS C12Q001-68
INCL 435006000; 514001000
     1-10 (Pharmacology)
     Section cross-reference(s): 3
FAN.CNT 1
     PATENT NO.
                         KIND
                               DATE
                                           APPLICATION NO.
                                                                  DATE
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PI US 2003124590
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                                            US 2002-272206
                                                                    20021016
PRAI US 2001-329834P
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CLASS
                 CLASS PATENT FAMILY CLASSIFICATION CODES
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                 ICS
                        C12Q001-68
                 INCL
                        435006000; 514001000
                        435/006.000; 514/001.000
US 2003124590
                NCL
                 ECLA
                        A61K031/00
     The present invention relates to the field of transcriptional regulation.
AB
    More specifically, it relates to a novel transcription factor,
     Carbohydrate Response Element-Binding Protein (ChREBP). ChREBP is associated
     with carbohydrate metabolism and the conversion of dietary excess carbohydrate
     to body fat. The present invention relates to activation and inhibition
     of ChREBP transcriptional activity and uses thereof.
     carbohydrate response element binding protein lipogenesis
ST
ΙT
     Transcription factors
     RL: BSU (Biological study, unclassified); BIOL (Biological study)
        (ChREBP (carbohydrate response element-binding protein); carbohydrate
        response element-binding protein for antiobesity and antidiabetic use)
TТ
     Cell nucleus
        (ChREBP localization into; carbohydrate response element-binding
        protein for antiobesity and antidiabetic use)
IT
     Proteins
     RL: BSU (Biological study, unclassified); BIOL (Biological study)
        (DNA-binding, modulators of; carbohydrate response element-binding
        protein for antiobesity and antidiabetic use)
TТ
     Signal peptides
        (NLS (nuclear localization signal); carbohydrate response
        element-binding protein for antiobesity and antidiabetic use)
     Antidiabetic agents
     Antiobesity agents
    Blood vessel, disease
     Cardiovascular agents
     Diabetes mellitus
     Drug screening
     Human
    Liver
    Metabolic pathways
    Molecular cloning
     Obesity
        (carbohydrate response element-binding protein for antiobesity and
        antidiabetic use)
IT
    Enzymes, biological studies
     Hormones, animal, biological studies
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (carbohydrate response element-binding protein for antiobesity and
        antidiabetic use)
IT
    Genetic element
     RL: BSU (Biological study, unclassified); BIOL (Biological study)
        (carbohydrate response element; carbohydrate response element-binding
        protein for antiobesity and antidiabetic use)
IT
    Diet
        (high-carbohydrate; carbohydrate response element-binding protein for
        antiobesity and antidiabetic use)
TТ
        (inhibition of; carbohydrate response element-binding protein for
        antiobesity and antidiabetic use)
     Lipids, biological studies
IT
    RL: BSU (Biological study, unclassified); BIOL (Biological study)
        (lipogenesis, inhibition of; carbohydrate response element-binding
        protein for antiobesity and antidiabetic use)
IT
     Phosphorylation, biological
        (modulators of; carbohydrate response element-binding protein for
        antiobesity and antidiabetic use)
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IT
     Carbohydrates, biological studies
     RL: BSU (Biological study, unclassified); BIOL (Biological study)
        (response element; carbohydrate response element-binding protein for
        antiobesity and antidiabetic use)
IT
    Liver
        (toxicity; carbohydrate response element-binding protein for
        antiobesity and antidiabetic use)
     9004-10-8, Insulin, biological studies
                                              9023-93-2, Acetyl coa carboxylase
IT
     9027-95-6, Atp citrate lyase 9045-77-6, Fatty acid synthase
     RL: BSU (Biological study, unclassified); BIOL (Biological study)
        (DNA encoding; carbohydrate response element-binding protein for
        antiobesity and antidiabetic use)
     9001-59-6, Pyruvate kinase
IT
     RL: BSU (Biological study, unclassified); BIOL (Biological study)
        (L-type, DNA encoding; carbohydrate response element-binding protein
        for antiobesity and antidiabetic use)
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TТ
     RL: BSU (Biological study, unclassified); PRP (Properties); BIOL
     (Biological study)
        (amino acid sequence; carbohydrate response element-binding protein for
        antiobesity and antidiabetic use)
ΤТ
     362-74-3, Dibutyryl-camp
     RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (carbohydrate response element-binding protein for antiobesity and
        antidiabetic use)
ΙT
     9013-05-2, Phosphatase
     RL: BSU (Biological study, unclassified); BIOL (Biological study)
        (inhibitors; carbohydrate response element-binding protein for
        antiobesity and antidiabetic use)
     9014-00-0, Luciferase
TΥ
     RL: BSU (Biological study, unclassified); BIOL (Biological study)
        (marker gene encoding; carbohydrate response element-binding protein
        for antiobesity and antidiabetic use)
     50-99-7, Glucose, biological studies
IT
    RL: BSU (Biological study, unclassified); BIOL (Biological study)
        (metabolism of; carbohydrate response element-binding protein for
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    RL: PRP (Properties)
        (unclaimed nucleotide sequence; carbohydrate response element-binding
        protein and uses thereof)
TТ
                  552315-06-7
                                552315-07-8
                                             552315-08-9
    125911-68-4
    RL: PRP (Properties)
        (unclaimed sequence; carbohydrate response element-binding protein and
        uses thereof)
L45 ANSWER 4 OF 11 HCAPLUS COPYRIGHT 2005 ACS on STN
    2003:511096 HCAPLUS
ΑN
    139:81326
DN
ED
    Entered STN: 04 Jul 2003
    Human and mouse diacylglycerol acyltransferase 2 sequence homologs, their
     sequences, recombinant production, and use as modulators in treatment of
    disorders such as obesity
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Gimeno, Ruth E.; Wu, Zhidan; Kapeller-Libermann, Rosana; Hubbard, Brian K.
IN
PΑ
    Millennium Pharmaceuticals, Inc., USA
     PCT Int. Appl., 154 pp.
SO
     CODEN: PIXXD2
DT
    Patent
    English
LA
IC
    ICM A61K
     7-5 (Enzymes)
CC
     Section cross-reference(s): 1, 3, 13, 14
FAN.CNT 1
     PATENT NO.
                        KIND DATE
                                            APPLICATION NO.
                                                                    DATE
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                        A2
                                20030703
                                          WO 2002-US40974
                                                                    20021219
    WO 2003053363
                               20040429
                         A3
    WO 2003053363
         W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
             GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
             LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,
             PL, PT, RO, RU, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA,
         UG, UZ, VN, YU, ZA, ZM, ZW
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
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             FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR, BF, BJ,
             CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
                         A1
     US 2003170691
                                20030911 US 2002-324618
                                                                    20021219
                          A2
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                                            EP 2002-805653
                                                                    20021219
     EP 1455815
            AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK
PRAI US 2001-341947P P
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    US 2002-411859P
    WO 2002-US40974
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                                20021219
CLASS
                CLASS PATENT FAMILY CLASSIFICATION CODES
 PATENT NO.
WO 2003053363 ICM
                        A61K
WO 2003053363 ECLA
                        C12N009/10C1A
                NCL 435/006.000; 435/069.100; 435/193.000; 435/320.100;
US 2003170691
                        435/325.000; 536/023.200
                        C12N009/10C1A
                 ECLA
     The invention provides various cDNA mols. encoding human and mouse
     diacylglycerol acyltransferase 2 (DGAT2) sequence homologs. The human
     cDNA mols. are designated 60489, 112041, 112037, 58765, 58765short,
     112023, 112024 and hDC2, while the mouse cDNA mols. are designated m86606,
    m5875, m112023, and mDC2. The invention also provides a vector containing
     said cDNA mols., and a host cell transformed with said vector for
     recombinant DGAT2 sequence homolog protein production The invention further
     provides said DGAT2 sequence homolog polypeptides, and antibodies, and/or
     fusion proteins thereof. Still further, the invention provides a method
     for: (a) identifying a compound capable of modulating an adipocyte activity
    using said DGAT2 family member cDNA mols. or polypeptides, and use of
     identified modulator; (b) determining acyltransferase activity of a polypeptide
     (such as DGAT2 sequence homologs) utilizing labeled substrates; and (c)
     identifying a compound (modulator) capable of treating a disorder
     characterized by aberrant DGAT2 family member nucleic acid expression or
     activity (such as obesity), wherein said modulator is organic small mol., and
    anti-DGAT2 antibody, or one of the disclosed DGAT2 sequence homolog
     polypeptides. Finally, the invention provides the cDNA and amino acid
     sequences of said human and mouse DGAT2 sequence homologs. The invention
     discussed that the DGAT2 sequence homologs can be used in screening
     assays, and as therapeutic agents for controlling one or more disorders
    associated with adipocyte differentiation and metabolism, and metabolic
     disorders. The invention is based, at least in part, on the discovery
     that the DGAT2 sequence homolog cDNAs and polypeptides were expressed at
    high levels in adipose, liver and small intestine, colon, and kidney, and
     were regulated during conditions which affect differentiation and metabolism
    of adipocytes, and are downregulated in genetic animal models of obesity.
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ST cDNA diacylglycerol acyltransferase 2 sequence homolog human mouse; protein sequence diacylglycerol acyltransferase 2 homolog human mouse; recombinant prodn diacylglycerol acyltransferase 2 sequence homolog; therapy obesity aberrant lipogenesis anti DGAT2 antibody small mol; obesity aberrant lipogenesis therapy DGAT2 sequence homolog; triglyceride aberrant synthesis treatment DGAT2 sequence homolog

IT Lipids, biological studies

RL: ADV (Adverse effect, including toxicity); BIOL (Biological study) (aberrant generation of; method for identifying compound capable of treating disorder associated with aberrant DGAT2 family member, wherein said disorder is associated with obesity, aberrant lipogenesis or triglyceride synthesis)

IT Glycerides, biological studies

RL: ADV (Adverse effect, including toxicity); BIOL (Biological study) (aberrant synthesis of; method for identifying compound capable of treating disorder associated with aberrant DGAT2 family member, wherein said disorder is associated with obesity, aberrant lipogenesis or triglyceride synthesis)

IT Adipose tissue

(adipocyte; modulating adipocyte activity (such as diacylglyceroltransferase activity, hyperplastic growth, hypertropic growth or lipogenesis) using DGAT2 sequence homologs, anti-DGAT2 antibodies or organic small mol.)

IT Antibodies and Immunoglobulins

RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(antibodies specific for human and mouse diacylglycerol acyltransferase 2 sequence homologs, and use of anti-DGAT2 antibodies as modulator for treating individual suffering with obesity, aberrant lipogenesis or triglyceride synthesis)

IT Diglycerides

RL: BSU (Biological study, unclassified); BIOL (Biological study)
(as substrate, labeled with biotin or radioactivity; method use for
determining acyltransferase activity of human and mouse DGAT2 sequence
homologs using labeled fatty acyl CoA and acylglyceride substrates)

IT Molecular cloning

(cDNA mols. encoding human and mouse diacylglycerol acyltransferase 2 (DGAT2) sequence homologs, and plasmid vectors containing said cDNAs for use in recombinant protein production)

IT cDNA sequences

(cDNA mols. encoding human and mouse diacylglycerol acyltransferase 2 sequence homologs, their sequences, and biol. uses)

TT Fusion proteins (chimeric proteins)

RL: BSU (Biological study, unclassified); BIOL (Biological study) (human and mouse diacylglycerol acyltransferase 2 sequence homologs, and fusion proteins comprising said homologs)

IT Human

(human diacylglycerol acyltransferase 2 sequence homologs, their sequences, recombinant production, and use as modulators in treatment of disorders such as obesity)

IT Lipids, biological studies

RL: ADV (Adverse effect, including toxicity); BIOL (Biological study) (metabolic disorders; method for identifying compound capable of treating disorder associated with aberrant DGAT2 family member, wherein said disorder is associated with obesity, aberrant lipogenesis or triglyceride synthesis)

IT Antiobesity agents

Drug screening

Obesity

(method for identifying compound capable of treating disorder associated with aberrant DGAT2 family member, wherein said disorder is associated with obesity, aberrant lipogenesis or triglyceride synthesis)

IT Protein sequences

(mouse and human diacylglycerol acyltransferase 2 sequence homologs, their sequences, recombinant production, and use as modulators in treatment of disorders such as obesity)

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ΙT
     Mus musculus
        (mouse diacylglycerol acyltransferase 2 sequence homologs, their
        sequences, recombinant production, and use as modulators in treatment of
        disorders such as obesity)
     9029-98-5P, Diacylglycerol acyltransferase
IT
     RL: BPN (Biosynthetic preparation); BUU (Biological use, unclassified);
     PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP
     (Preparation); USES (Uses)
        (2, sequence homolog; human and mouse diacylglycerol acyltransferase 2
        sequence homologs, their sequences, recombinant production, and use as
        modulators of adipocyte activity and in treatment of disorders such as
        obesity)
ΙT
     552443-59-1P
                    552443-61-5P
                                   552443-63-7P
                                                   552443-65-9P
                                                                   552443-68-2P
     552443-70-6P
                    552443-72-8P 552443-74-0P
                                                   552443-76-2P
     RL: BPN (Biosynthetic preparation); BUU (Biological use, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP
     (Preparation); USES (Uses)
        (amino acid sequence; human and mouse diacylglycerol acyltransferase 2
        sequence homologs, their sequences, recombinant production, and use as
        modulators of adipocyte activity and in treatment of disorders such as
        obesity)
TT
     552443-79-5P
     RL: BPN (Biosynthetic preparation); BUU (Biological use, unclassified);
     PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP
     (Preparation); USES (Uses)
        (amino acid sequence; human and mouse diacylglycerol acyltransferase 2
        sequence homologs, their uses and use as modulators in treatment of
        disorders such as obesity)
                   552443-81-9
     RL: BSU (Biological study, unclassified); PRP (Properties); THU
     (Therapeutic use); BIOL (Biological study); USES (Uses)
        (amino acid sequence; human and mouse diacylglycerol acyltransferase 2
        sequence homologs, their uses as modulators in treatment of disorders
        such as obesity)
ΙT
     552443-29-5
     RL: BSU (Biological study, unclassified); PRP (Properties); THU
     (Therapeutic use); BIOL (Biological study); USES (Uses)
        (amino acid sequence; of human diacylglycerol acyltransferase 2, and
        its use as a modulator in treatment of disorders such as obesity)
     85-61-0D, Coenzyme A, fatty acyl derivs., labeled with biotin or
     radioactivity
     RL: BSU (Biological study, unclassified); BIOL (Biological study)
        (as substrate; method use for determining acyltransferase activity of human
        and mouse DGAT2 sequence homologs using labeled fatty acyl CoA and
        acylqlyceride substrates)
ΙT
     9055-17-8, Monoacylglycerol acyltransferase
     RL: BSU (Biological study, unclassified); BIOL (Biological study)
        (method use for determining acyltransferase activity of human and mouse DGAT2
        sequence homologs using labeled fatty acyl CoA and acylglyceride
        substrates)
     552443-57-9
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                                 552443-60-4
                                                552443-62-6
                                                               552443-64-8
IT
                                                552443-71-7
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     552443-66-0
                   552443-67-1
                                 552443-69-3
     552443-75-1
                   552443-77-3
                                 552443-78-4
     RL: BUU (Biological use, unclassified); PRP (Properties); BIOL (Biological
     study); USES (Uses)
        (nucleotide sequence; cDNA mols. encoding human and mouse
        diacylglycerol acyltransferase 2 sequence homologs, their sequences,
        and biol. uses)
ΙT
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                                 552445-31-5
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552445-29-1

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RL: PRP (Properties)
        (unclaimed nucleotide sequence; human and mouse diacylglycerol
       acyltransferase 2 sequence homologs, their sequences, recombinant
       production, and use as modulators in treatment of disorders such as
       obesity)
L45 ANSWER 5 OF 11 HCAPLUS COPYRIGHT 2005 ACS on STN
    2002:736796 HCAPLUS
AN
DN
    137:257694
ED
    Entered STN: 27 Sep 2002
    Short peptides from the 'A-region' of protein kinases which selectively
TI
    modulate protein kinase activity
    Ben-Sasson, Shmuel
    Children's Medical Center Corporation, USA
PA
    U.S. Pat. Appl. Publ., 79 pp., Cont.-in-part of U.S. Ser. No. 734,520.
SO
    CODEN: USXXCO
    Patent
DТ
LA
    English
    ICM C12Q001-68
    ICS C12N009-12; A61K038-16; C12P021-02
INCL 435069100
    1-12 (Pharmacology)
    Section cross-reference(s): 7
FAN.CNT 2
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    PATENT NO.
                       KIND DATE
                                                                DATE
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                               20020926
                                          US 2001-12034
                                                                 20011211
    US 2002137141
                        A1
                               20020822
                                        US 2000-734520
                                                                 20001211
    US 2002115173
                        A1
PRAI US 2000-734520
                        A2
                               20001211
CLASS
 PATENT NO.
               CLASS PATENT FAMILY CLASSIFICATION CODES
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                       C12Q001-68
 US 2002137141
                ICM
                ICS
                       C12N009-12; A61K038-16; C12P021-02
                INCL
                       435069100
                       435/069.100; 514/012.000; 435/006.000; 435/194.000
 US 2002137141
              NCL
                ECLA
                       C12N009/12B1
                       435/194.000; 435/070.210; 435/007.920
 US 2002115173
                NCL
                       C12N009/12B1
                ECLA
OS
    MARPAT 137:257694
    The invention provides compds. comprising, within short sequences from a
AΒ
     specific region of the kinase, that can modulate kinase-associated signal
     transduction. Methods for identification of candidate compds. are
    disclosed, as are disease treatment methods.
    protein kinase peptide screening signal transduction therapeutic
ST
        (A region; peptides from A-region of protein kinases which selectively
       modulate protein kinase activity)
IT
    Adipose tissue
        (adipocyte, lipogenesis; peptides from A-region of protein kinases
       which selectively modulate protein kinase activity)
     Lipids, biological studies
IT
    RL: BSU (Biological study, unclassified); BIOL (Biological study)
        (adipose cell lipogenesis; peptides from A-region of protein kinases
       which selectively modulate protein kinase activity)
IT
    Antiarteriosclerotics
        (antiatherosclerotics; peptides from A-region of protein kinases which
        selectively modulate protein kinase activity)
ΙT
    Nervous system, disease
        (central; peptides from A-region of protein kinases which selectively
       modulate protein kinase activity)
IT
    Nervous system, disease
        (degeneration; peptides from A-region of protein kinases which
       selectively modulate protein kinase activity)
TT
     Immunity
        (disorder; peptides from A-region of protein kinases which selectively
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modulate protein kinase activity)
IT
     Biological transport
        (drug; peptides from A-region of protein kinases which selectively
        modulate protein kinase activity)
TT
     Blood vessel
        (endothelium, protein kinase; peptides from A-region of protein kinases
        which selectively modulate protein kinase activity)
IT
     Blood
        (qlucose level; peptides from A-region of protein kinases which
        selectively modulate protein kinase activity)
IT
     Bone
        (healing; peptides from A-region of protein kinases which selectively
        modulate protein kinase activity)
TΤ
     Neoplasm
        (metastasis; peptides from A-region of protein kinases which
        selectively modulate protein kinase activity)
TΤ
     Nervous system
        (neural crest, neural crest cell emigration; peptides from A-region of
        protein kinases which selectively modulate protein kinase activity)
IT
     Axon
        (outgrowth; peptides from A-region of protein kinases which selectively
        modulate protein kinase activity)
IT
     Adipose tissue
     Alopecia
     Anti-inflammatory agents
     Antidiabetic agents
     Antiobesity agents
     Antitumor agents
     Appetite
     Atherosclerosis
     Autoimmune disease
     Body weight
     Cardiovascular agents
     Cardiovascular system, disease
     Cell proliferation
     Diabetes mellitus
     Drug delivery systems
     Drug screening
     Fibrosis
     Infection
     Inflammation
     Metabolism
     Neoplasm
     Nervous system agents
     Obesity
     Osteoporosis
     Peptidomimetics
     Secretion (process)
     Signal transduction, biological
     Skin, disease
        (peptides from A-region of protein kinases which selectively modulate
        protein kinase activity)
TΥ
     Cytokines
     Hormones, animal, biological studies
     RL: BSU (Biological study, unclassified); BIOL (Biological study)
        (peptides from A-region of protein kinases which selectively modulate
        protein kinase activity)
TT
     Peptides, biological studies
     RL: BSU (Biological study, unclassified); PAC (Pharmacological activity);
     THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (peptides from A-region of protein kinases which selectively modulate
        protein kinase activity)
ΙT
     Phosphorylation, biological
        (protein; peptides from A-region of protein kinases which selectively
        modulate protein kinase activity)
TΤ
     Animal tissue
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(remodeling; peptides from A-region of protein kinases which
       selectively modulate protein kinase activity)
TT
    Artery, disease
        (restenosis; peptides from A-region of protein kinases which
       selectively modulate protein kinase activity)
    Neurotrophic factor receptors
IT
    RL: BSU (Biological study, unclassified); BIOL (Biological study)
        (ret; peptides from A-region of protein kinases which selectively
       modulate protein kinase activity)
TΤ
    Wound
        (scar formation; peptides from A-region of protein kinases which
       selectively modulate protein kinase activity)
     Animal cell
TT
        (shape and elongation; peptides from A-region of protein kinases which
       selectively modulate protein kinase activity)
ΙT
    Biological transport
        (uptake, glucose; peptides from A-region of protein kinases which
       selectively modulate protein kinase activity)
IT
     Endothelium
        (vascular, protein kinase; peptides from A-region of protein kinases
       which selectively modulate protein kinase activity)
    Amino acids, biological studies
IT
     RL: BSU (Biological study, unclassified); BIOL (Biological study)
        (D-; peptides from A-region of protein kinases which selectively
       modulate protein kinase activity)
     142008-29-5, Protein kinase A
TТ
     RL: BSU (Biological study, unclassified); BIOL (Biological study)
        (Cα; peptides from A-region of protein kinases which selectively
       modulate protein kinase activity)
     438582-72-0
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     RL: PRP (Properties)
        (Unclaimed; short peptides from the 'A-region' of protein kinases which
       selectively modulate protein kinase activity)
    56-41-7, L-Alanine, biological studies
                                             79079-06-4, EGF receptor protein
             88201-45-0, Insulin receptor kinase 114051-78-4, LCK kinase
     137010-36-7, NGF receptor tyrosine kinase 137632-06-5, CSK protein
            137632-07-6, ERK1 kinase 140208-17-9, LYN kinase
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    SRC kinase 145539-86-2, HCK kinase 146279-92-7, Gene ret receptor
     protein tyrosine kinase 148640-14-6, Protein kinase B 153190-61-5,
     TYK2 protein kinase 161384-16-3, JAK kinase 162032-63-5, Discoidin domain receptor tyrosine kinase 165245-96-5, p38 MAP kinase
    domain receptor tyrosine kinase
     166433-56-3, ALK receptor tyrosine kinase
                                                199015-85-5, Activin
     receptor-like kinase 372092-80-3, Protein kinase
    RL: BSU (Biological study, unclassified); BIOL (Biological study)
        (peptides from A-region of protein kinases which selectively modulate
       protein kinase activity)
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     variant derivs. 438043-39-1 438043-39-1D, variant derivs.
                                                438043-42-6
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461638-42-6D, variant derivs.
     438043-81-3
                                            461638-41-5D, variant derivs.
     461638-42-6
                                                 461638-43-7
                                                              461638-43-7D.
     variant derivs. 461638-44-8 461638-44-8D, variant derivs.
     461638-45-9 461638-45-9D, variant derivs. 461638-46-0 461638-46-0D,
     variant derivs. 461638-47-1 461638-47-1D, variant derivs.
     461638-48-2 461638-48-2D, variant derivs.
     RL: BSU (Biological study, unclassified); PAC (Pharmacological activity);
     PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES
     (Uses)
        (peptides from A-region of protein kinases which selectively modulate
       protein kinase activity)
     438582-71-9
     RL: PRP (Properties)
        (unclaimed sequence; short peptides from the 'A-region' of protein
       kinases which selectively modulate protein kinase activity)
     50-99-7, D-Glucose, biological studies
     RL: BSU (Biological study, unclassified); BIOL (Biological study)
        (uptake; peptides from A-region of protein kinases which selectively
       modulate protein kinase activity)
L45 ANSWER 6 OF 11 HCAPLUS COPYRIGHT 2005 ACS on STN
     2002:675784 HCAPLUS
     137:210957
    Entered STN: 08 Sep 2002
     sequences of protein 14273 from human and mouse, and methods for the
     treatment of metabolic disorders, including obesity and diabetes
     Gimeno, Ruth; Tsai, Fong-Ying
    Millennium Pharmaceuticals, Inc., USA
    PCT Int. Appl., 95 pp.
     CODEN: PIXXD2
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DT
     Patent
     English
LΑ
     ICM A61K
IC
     1-10 (Pharmacology)
     Section cross-reference(s): 3, 6, 13
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                                                                       DATE
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     WO 2002067868 A2
WO 2002067868 A3
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                                  20020906
                                              WO 2002-US6131
                                                                       20020226
     WO 2002067868
                           A3
                                  20030306
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             GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU,
             TJ, TM
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH,
             CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
     US 2002177151
                           A1
                                  20021128
                                             US 2002-86181
                                                                       20020226
PRAI US 2001-271655P
                           Р
                                  20010226
CLASS
                CLASS PATENT FAMILY CLASSIFICATION CODES
 PATENT NO.
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                         A61K
WO 2002067868 ICM A61K
WO 2002067868 ECLA C07K014/705; C07K014/72B; C12Q001/68M6
 US 2002177151 NCL
                         435/006.000; 435/091.200
                 ECLA C07K014/705; C07K014/72B; C12Q001/68M6
     The present invention provides protein and cDNA sequences of human and
AB
     mouse protein 14273 that are expressed at high levels in adipose tissues
     (white and brown adipose tissues) and pancreatic tissues. The 14273 gene
     expression has been further found to be upregulated during exposure to
     cold, and down-regulated in genetic model of obesity. The present
     invention relates to methods and compns. for the diagnosis and treatment
     of metabolic disorders, including, but not limited to, obesity, diabetes,
     overweight, anorexia, or cachexia. The invention further provides methods for identifying a compound capable of treating a metabolic disorder. The
     invention also provides methods for identifying a compound capable of
     modulating a metabolic activity. Yet further, the invention provides a
     method for modulating a metabolic activity. In addition, the invention
     provides a method for treating a subject having a metabolic disorder
     characterized by aberrant 14273 polypeptide activity or aberrant 14273
     nucleic acid expression. In another aspect, the invention provides
     methods for modulating lipogenesis in a subject and methods for modulating
     lipolysis in a subject. In yet another aspect, the invention provides
     methods for regulating endogenous glucose levels.
     sequence protein human mouse metabolic disorder obesity diabetes therapy
ST
ΤТ
     Proteins
     RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified);
     DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); BIOL
     (Biological study); PREP (Preparation); USES (Uses)
         (14273; sequences of protein 14273 from human and mouse, and methods
        for treatment of metabolic disorders, including obesity and diabetes)
IT
     Adipose tissue
         (adipocyte, hyperplastic or hypertrophic growth, treatment of;
        sequences of protein 14273 from human and mouse, and methods for
        treatment of metabolic disorders, including obesity and diabetes)
IT
     Gel electrophoresis
         (agarose, for detecting 14273; sequences of protein 14273 from human
        and mouse, and methods for treatment of metabolic disorders, including
        obesity and diabetes)
IT
     Antisense DNA
     RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
         (anti-14273; sequences of protein 14273 from human and mouse, and
```

methods for treatment of metabolic disorders, including obesity and diabetes)

Adipose tissue TΤ

> (brown, high level of 14273 gene expression in; sequences of protein 14273 from human and mouse, and methods for treatment of metabolic disorders, including obesity and diabetes)

IT Metabolism, animal

(disorder, treatment of; sequences of protein 14273 from human and mouse, and methods for treatment of metabolic disorders, including obesity and diabetes)

IT

RL: BSU (Biological study, unclassified); BIOL (Biological study) (encoding protein 14273, tissue distribution; sequences of protein 14273 from human and mouse, and methods for treatment of metabolic disorders, including obesity and diabetes) Northern blot hybridization

IT

Nucleic acid amplification (method)

Southern blot hybridization

(for detecting 14273; sequences of protein 14273 from human and mouse, and methods for treatment of metabolic disorders, including obesity and diabetes)

Nucleic acid hybridization IT

(for detecting the presence of protein 14273 in a sample; sequences of protein 14273 from human and mouse, and methods for treatment of metabolic disorders, including obesity and diabetes)

ΤT Genetic vectors

> (for expressing protein 14273; sequences of protein 14273 from human and mouse, and methods for treatment of metabolic disorders, including obesity and diabetes)

TΤ Gene therapy

(for modulating the levels or activities of protein 14273; sequences of protein 14273 from human and mouse, and methods for treatment of metabolic disorders, including obesity and diabetes)

IT Nucleic acid hybridization

(in situ, for detecting 14273; sequences of protein 14273 from human and mouse, and methods for treatment of metabolic disorders, including obesity and diabetes)

ΙT Antibodies and Immunoglobulins

> RL: ARG (Analytical reagent use); DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)

(labeled, to protein 14273; sequences of protein 14273 from human and mouse, and methods for treatment of metabolic disorders, including obesity and diabetes)

Primers (nucleic acid) TT

Probes (nucleic acid)

RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses) (labeled; sequences of protein 14273 from human and mouse, and methods for treatment of metabolic disorders, including obesity and diabetes)

TΤ Lipids, biological studies

RL: BSU (Biological study, unclassified); BIOL (Biological study) (lipolysis, modulation of; sequences of protein 14273 from human and mouse, and methods for treatment of metabolic disorders, including obesity and diabetes)

IT Second messenger system

(modulation of; sequences of protein 14273 from human and mouse, and methods for treatment of metabolic disorders, including obesity and diabetes)

IT Diagnosis

> (mol.; sequences of protein 14273 from human and mouse, and methods for treatment of metabolic disorders, including obesity and diabetes)

TT Mutagenesis

(on 14273 gene; sequences of protein 14273 from human and mouse, and methods for treatment of metabolic disorders, including obesity and diabetes)

IT Lipids, biological studies

RL: BSU (Biological study, unclassified); BIOL (Biological study)

(production, modulation of; sequences of protein 14273 from human and mouse, and methods for treatment of metabolic disorders, including obesity and diabetes)

IT Antidiabetic agents

Antiobesity agents

Drug screening

Human

Molecular cloning

Protein sequences

cDNA sequences

(sequences of protein 14273 from human and mouse, and methods for treatment of metabolic disorders, including obesity and diabetes)

IT Antibodies and Immunoglobulins

RL: ARG (Analytical reagent use); DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)

(to protein 14273; sequences of protein 14273 from human and mouse, and methods for treatment of metabolic disorders, including obesity and diabetes)

IT Mus

(transgenic; sequences of protein 14273 from human and mouse, and methods for treatment of metabolic disorders, including obesity and diabetes)

IT Diabetes mellitus

Obesity

(treatment of; sequences of protein 14273 from human and mouse, and methods for treatment of metabolic disorders, including obesity and diabetes)

IT Adipose tissue

(white, high level of 14273 gene expression in; sequences of protein 14273 from human and mouse, and methods for treatment of metabolic disorders, including obesity and diabetes)

disorders, including obesity and diabetes)
IT 456538-24-2P, Protein (human clone 14273) 456538-26-4P, Protein (mouse clone 14273)

RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(amino acid sequence; sequences of protein 14273 from human and mouse, and methods for treatment of metabolic disorders, including obesity and diabetes)

IT 9012-36-6, Agarose

RL: DEV (Device component use); USES (Uses)

(gel electrophoresis, for detecting 14273; sequences of protein 14273 from human and mouse, and methods for treatment of metabolic disorders, including obesity and diabetes)

IT 456538-23-1 456538-25-3

RL: BSU (Biological study, unclassified); DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (nucleotide sequence; sequences of protein 14273 from human and mouse, and methods for treatment of metabolic disorders, including obesity and diabetes)

IT 456540-70-8, 3: PN: WO02067868 SEQID: 3 unclaimed DNA 456540-71-9, 6: PN: WO02067868 SEQID: 6 unclaimed DNA 456540-72-0 456540-73-1 456540-74-2 456540-75-3 456540-76-4 456540-77-5 456540-78-6 456540-79-7 456540-80-0 456540-81-1

RL: PRP (Properties)

(unclaimed nucleotide sequence; sequences of protein 14273 from human and mouse, and methods for treatment of metabolic disorders, including obesity and diabetes)

- L45 ANSWER 7 OF 11 HCAPLUS COPYRIGHT 2005 ACS on STN
- AN 2002:466175 HCAPLUS
- DN 137:43447
- ED Entered STN: 21 Jun 2002
- TI Short peptides from the "A-region" of protein kinases which selectively modulate kinase activity and kinase-associated signal transduction and their therapeutic use

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TN
     Ben-Sasson, Shmuel
PΑ
     Children's Medical Center Corporation, USA; Yissum Research and
     Development
     PCT Int. Appl., 143 pp.
SO
     CODEN: PIXXD2
DT
    Patent
LΑ
     English
    ICM C12N009-12
IC
     ICS A61K038-45; C12Q001-48
     7-3 (Enzymes)
    Section cross-reference(s): 1
FAN.CNT 2
     PATENT NO.
                        KIND DATE
                                            APPLICATION NO.
                                                                   DATE
                               -----
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    WO 2002048336
                                20020620
                                            WO 2001-US47443
PΙ
                         A2
                                                                   20011211
     WO 2002048336
                         A3
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         W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
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             GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
            LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
             DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,
             BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
                     A1
                               20020822 US 2000-734520 20001211
     US 2002115173
                                            AU 2002-28912
    AU 2002028912
                          A5
                                20020624
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PRAI US 2000-734520
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    WO 2001-US47443
                                20011211
CLASS
PATENT NO.
                CLASS PATENT FAMILY CLASSIFICATION CODES
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                       C12N009-12
WO 2002048336
                 ICM
                ICS
                       A61K038-45; C12Q001-48
              ECLA C12N009/12B1
WO 2002048336
                        435/194.000; 435/070.210; 435/007.920
US 2002115173 NCL
                ECLA
                       C12N009/12B1
os
     MARPAT 137:43447
AΒ
     The present invention concerns compds. comprising, within short sequences
     from a specific region of the kinase, that can modulate kinase-associated
     signal transduction. The present invention allows a method for
     identifying compds. that are candidates for modulating kinase-associated
     signal transduction. The present invention also enables obtaining compds.
     that can modulate the kinase-associated signal transduction. The present
     invention also concerns a method for the modulation of kinase-associated
     signal transduction comprising the administration of the compds. This
     method may be used for the treatment of a plurality of diseases that are
     caused by or are result of non-normal kinase activity.
ST
     protein kinase A region peptide signal transduction therapeutic
     Adipose tissue
IT
        (adipocyte, lipogenesis by; short peptides from A-region of protein
        kinases which selectively modulate kinase activity and kinase-associated
        signal transduction and their therapeutic use)
     Antiarteriosclerotics
IT
        (antiatherosclerotics; short peptides from A-region of protein kinases
        which selectively modulate kinase activity and kinase-associated signal
        transduction and their therapeutic use)
TΤ
    Nervous system, disease
        (central, treatment of; short peptides from A-region of protein kinases
        which selectively modulate kinase activity and kinase-associated signal
        transduction and their therapeutic use)
    Nervous system, disease
IT
        (degeneration, treatment of; short peptides from A-region of protein
        kinases which selectively modulate kinase activity and kinase-associated
        signal transduction and their therapeutic use)
IT
     Bone, disease
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(healing, in signal transduction test assay; short peptides from A-region of protein kinases which selectively modulate kinase activity and kinase-associated signal transduction and their therapeutic use) TΤ Appetite Biological transport Body weight Granulation tissue Infection Inflammation Neoplasm (in signal transduction test assay; short peptides from A-region of protein kinases which selectively modulate kinase activity and kinase-associated signal transduction and their therapeutic use) ΤТ Cytokines Hormones, animal, biological studies RL: ANT (Analyte); BSU (Biological study, unclassified); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses) (in signal transduction test assay; short peptides from A-region of protein kinases which selectively modulate kinase activity and kinase-associated signal transduction and their therapeutic use) Lipids, biological studies RL: BSU (Biological study, unclassified); BIOL (Biological study) (lipogenesis by adipocytes; short peptides from A-region of protein kinases which selectively modulate kinase activity and kinase-associated signal transduction and their therapeutic use) IT Neoplasm (metastasis, in signal transduction test assay; short peptides from A-region of protein kinases which selectively modulate kinase activity and kinase-associated signal transduction and their therapeutic use) TΤ Axon (outgrowth, in signal transduction test assay; short peptides from A-region of protein kinases which selectively modulate kinase activity and kinase-associated signal transduction and their therapeutic use) ΙT Phosphorylation, biological (protein; short peptides from A-region of protein kinases which selectively modulate kinase activity and kinase-associated signal transduction and their therapeutic use) IT Animal tissue (remodeling, in signal transduction test assay; short peptides from A-region of protein kinases which selectively modulate kinase activity and kinase-associated signal transduction and their therapeutic use) Artery, disease IT (restenosis, treatment of; short peptides from A-region of protein kinases which selectively modulate kinase activity and kinase-associated signal transduction and their therapeutic use) ΙT Anti-inflammatory agents Antidiabetic agents Antiobesity agents Antitumor agents Cell differentiation Cell morphology Cell proliferation Drug screening Immunomodulators Peptidomimetics Protein sequences Secretion (process) Signal transduction, biological (short peptides from A-region of protein kinases which selectively modulate kinase activity and kinase-associated signal transduction and their therapeutic use) Peptides, biological studies TT RL: BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (short peptides from A-region of protein kinases which selectively modulate kinase activity and kinase-associated signal transduction and

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their therapeutic use)
IT
    Osteoporosis
        (therapeutic agents; short peptides from A-region of protein kinases
        which selectively modulate kinase activity and kinase-associated signal
        transduction and their therapeutic use)
TΤ
    Alopecia
    Autoimmune disease
     Cardiovascular system, disease
    Skin, disease
        (treatment of; short peptides from A-region of protein kinases which
        selectively modulate kinase activity and kinase-associated signal
        transduction and their therapeutic use)
     Biological transport
TT
        (uptake, of glucose; short peptides from A-region of protein kinases
        which selectively modulate kinase activity and kinase-associated signal
        transduction and their therapeutic use)
    Amino acids, biological studies
TΨ
    RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (D-; short peptides from A-region of protein kinases which selectively
        modulate kinase activity and kinase-associated signal transduction and
        their therapeutic use)
    142008-29-5, Protein kinase A
TТ
     RL: BSU (Biological study, unclassified); PRP (Properties); THU
     (Therapeutic use); BIOL (Biological study); USES (Uses)
        (Ca subunit; short peptides from A-region of protein kinases
        which selectively modulate kinase activity and kinase-associated signal
        transduction and their therapeutic use)
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     88201-45-0, Insulin receptor kinase
     137010-36-7, NGF receptor tyrosine kinase
                                                137632-06-5, CSK protein
            140208-17-9, LYN kinase 141349-89-5, SRC kinase
                                                                  145539-86-2,
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    HCK kinase
                 146279-92-7, Gene ret receptor tyrosine kinase
                                                                   153190-61-5,
                                            162032-63-5, Discoidin domain
                  161384-16-3, Jak kinase
     Tyk2 kinase
     receptor tyrosine kinase 199015-85-5, Activin receptor-like kinase
     372092-80-3, Protein kinase
                                   386705-49-3, VEGF receptor tyrosine kinase
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     RL: BSU (Biological study, unclassified); PRP (Properties); THU
     (Therapeutic use); BIOL (Biological study); USES (Uses)
        (short peptides from A-region of protein kinases which selectively
        modulate kinase activity and kinase-associated signal transduction and
        their therapeutic use)
    56-41-7, L-Alanine, biological studies
TТ
     RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
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(short peptides from A-region of protein kinases which selectively
        modulate kinase activity and kinase-associated signal transduction and
        their therapeutic use)
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IT
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                                 438582-79-7
                                                438582-80-0
                                                              438582-81-1
     438582-76-4
     438582-82-2 438582-83-3
                                 438582-84-4
                                                438582-85-5
     RL: PRP (Properties)
        (unclaimed sequence; short peptides from the "A-region" of protein
        kinases which selectively modulate kinase activity and kinase-associated
        signal transduction and their therapeutic use)
     50-99-7, Glucose, biological studies
IT
     RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (uptake and blood level; short peptides from A-region of protein
        kinases which selectively modulate kinase activity and kinase-associated
        signal transduction and their therapeutic use)
L45 ANSWER 8 OF 11 HCAPLUS COPYRIGHT 2005 ACS on STN
     2002:172081 HCAPLUS
     136:227973
DN
ΕĎ
     Entered STN: 08 Mar 2002
     Protein and cDNA sequences of a novel human G protein-coupled receptor
TI
     sequence homolog and diagnostic and therapeutic uses thereof for metabolic
    Glucksmann, Maria Alexdandra
IN
    Millennium Pharmaceuticals, Inc., USA
PΑ
     PCT Int. Appl., 114 pp.
SO
     CODEN: PIXXD2
DT
     Patent
LA
     English
     ICM C12N015-00
IC
     3-3 (Biochemical Genetics)
     Section cross-reference(s): 1, 6, 13
FAN.CNT 1
     PATENT NO.
                         KIND DATE
                                            APPLICATION NO.
                                                                    DATE
                                -----
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     WO 2002018579
                          A2
                                20020307
                                            WO 2001-US26882
                                                                    20010829
PΤ
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                          A3
                                20030417
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             CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
             GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
             LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AM, AZ, BY, KG,
             KZ, MD, RU, TJ, TM, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR,
             IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
     AU 2001086877
                          A5
                                20020313
                                             AU 2001-86877
                                                                     20010829
     US 2002137063
                                20020926
                                             US 2001-942374
                                                                    20010829
                          A1
                                20040506
                                             US 2003-665956
                                                                    20030918
     US 2004086921
                          A1
PRAI US 2000-228409P
                          P
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     US 2001-942374
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                                20010829
     WO 2001-US26882
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                                20010829
CLASS
                 CLASS PATENT FAMILY CLASSIFICATION CODES
 PATENT NO.
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 WO 2002018579
                 ICM
                        C12N015-00
 WO 2002018579
                 ECLA
                        C07K014/705
                        435/006.000; 435/007.100; 435/069.100; 435/320.100;
 US 2002137063
                 NCL
                        435/325.000; 530/350.000; 530/388.100; 536/023.500
                 ECLA
                        C07K014/705
                        435/006.000; 435/069.100; 435/320.100; 435/325.000;
 US 2004086921
                 NCL
                        530/350.000; 536/023.500
                 ECLA
                        C07K014/705
     The invention provides protein and cDNA sequences of a novel human
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protein, designated 57242, which has sequence homol. with G protein-coupled receptor family members. The invention also provides antisense nucleic acid mols., recombinant expression vectors containing 57242 nucleic acid mols., host cells into which the expression vectors have been introduced, and nonhuman transgenic animals in which a 57242 gene has been introduced or disrupted. The invention still further provides isolated 57242 proteins, fusion proteins, antigenic peptides and anti-57242 antibodies. Methods of use of the provided 57242 compns. for screening, diagnostic and therapeutic methods in connection with metabolic disorders are also disclosed. The present invention relates to methods and compns. for the diagnosis and treatment of metabolic disorders, including, but not limited to, obesity, diabetes, hyperlipidemia, overweight anorexia, or cachexia.

ST G protein coupled receptor homolog cDNA sequence human

r Disease, animal

(adipose tissue, hyperplastic or hypertrophic, treatment of; protein and cDNA sequences of novel human G protein-coupled receptor sequence homolog and diagnostic and therapeutic uses thereof for metabolic disorders)

IT Adipose tissue

(disease, hyperplastic or hypertrophic, treatment of; protein and cDNA sequences of novel human G protein-coupled receptor sequence homolog and diagnostic and therapeutic uses thereof for metabolic disorders)

IT Metabolism, animal

(disorder, treatment of; protein and cDNA sequences of novel human G protein-coupled receptor sequence homolog and diagnostic and therapeutic uses thereof for metabolic disorders)

IT Bone formation

(disorders associated with, treatment of; protein and cDNA sequences of novel human G protein-coupled receptor sequence homolog and diagnostic and therapeutic uses thereof for metabolic disorders)

IT DNA

RL: ANT (Analyte); ANST (Analytical study)
(encoding 57242, detection of; protein and cDNA sequences of novel
human G protein-coupled receptor sequence homolog and diagnostic and
therapeutic uses thereof for metabolic disorders)

IT CDNA

RL: BSU (Biological study, unclassified); BIOL (Biological study) (encoding G protein-coupled receptor sequence homolog 57242; protein and cDNA sequences of novel human G protein-coupled receptor sequence homolog and diagnostic and therapeutic uses thereof for metabolic disorders)

IT Test kits

(for detecting G protein-coupled receptor sequence homolog 57242; protein and cDNA sequences of novel human G protein-coupled receptor sequence homolog and diagnostic and therapeutic uses thereof for metabolic disorders)

IT Gel electrophoresis

Immunoassay

Northern blot hybridization

Nucleic acid hybridization

Southern blot hybridization

(for detecting the presence of G protein-coupled receptor sequence homolog in a sample; protein and cDNA sequences of novel human G protein-coupled receptor sequence homolog and diagnostic and therapeutic uses thereof for metabolic disorders)

IT Genetic vectors

(for expressing G protein-coupled receptor sequence homolog 57242; protein and cDNA sequences of novel human G protein-coupled receptor sequence homolog and diagnostic and therapeutic uses thereof for metabolic disorders)

IT Gene therapy

(for modulating the levels or activities of 57242; protein and cDNA sequences of novel human G protein-coupled receptor sequence homolog and diagnostic and therapeutic uses thereof for metabolic disorders)

IT Diagnosis

(genetic; protein and cDNA sequences of novel human G protein-coupled receptor sequence homolog and diagnostic and therapeutic uses thereof for metabolic disorders)

IT Lipids, biological studies

RL: BSU (Biological study, unclassified); BIOL (Biological study) (hyperlipidemia, treatment of; protein and cDNA sequences of novel human G protein-coupled receptor sequence homolog and diagnostic and therapeutic uses thereof for metabolic disorders)

IT Nucleic acid hybridization

(in situ, for detecting the presence of G protein-coupled receptor sequence homolog in a sample; protein and cDNA sequences of novel human G protein-coupled receptor sequence homolog and diagnostic and therapeutic uses thereof for metabolic disorders)

IT Lipids, biological studies

RL: BSU (Biological study, unclassified); BIOL (Biological study)
(lipolysis, disorders associated with, treatment of; protein and cDNA
sequences of novel human G protein-coupled receptor sequence homolog
and diagnostic and therapeutic uses thereof for metabolic disorders)
Animal cell

(mammalian, as host; protein and cDNA sequences of novel human G protein-coupled receptor sequence homolog and diagnostic and therapeutic uses thereof for metabolic disorders)

IT Lipids, biological studies

RL: BSU (Biological study, unclassified); BIOL (Biological study)
(metabolic disorders, lipogenesis, treatment of; protein and cDNA
sequences of novel human G protein-coupled receptor sequence homolog
and diagnostic and therapeutic uses thereof for metabolic disorders)

IT Antisense DNA

IT

Ribozymes

RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(modulator for 57242 expression or activity; protein and cDNA sequences of novel human G protein-coupled receptor sequence homolog and diagnostic and therapeutic uses thereof for metabolic disorders)

IT Diagnosis

(mol.; protein and cDNA sequences of novel human G protein-coupled receptor sequence homolog and diagnostic and therapeutic uses thereof for metabolic disorders)

IT Antidiabetic agents

Antiobesity agents

Drug screening

Human

Molecular cloning

Protein sequences

cDNA sequences

(protein and cDNA sequences of novel human G protein-coupled receptor sequence homolog and diagnostic and therapeutic uses thereof for metabolic disorders)

IT Primers (nucleic acid)

Probes (nucleic acid)

RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses) (protein and cDNA sequences of novel human G protein-coupled receptor sequence homolog and diagnostic and therapeutic uses thereof for metabolic disorders)

IT G protein-coupled receptors

RL: BSU (Biological study, unclassified); BIOL (Biological study) (sequence homolog; protein and cDNA sequences of novel human G protein-coupled receptor sequence homolog and diagnostic and therapeutic uses thereof for metabolic disorders)

IT Antibodies and Immunoglobulins

RL: ARG (Analytical reagent use); BSU (Biological study, unclassified); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)

(to G protein-coupled receptor sequence homolog; protein and cDNA sequences of novel human G protein-coupled receptor sequence homolog and diagnostic and therapeutic uses thereof for metabolic disorders)

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Anorexia
TT
     Bone, disease
     Cachexia
        (treatment of; protein and cDNA sequences of novel human G
        protein-coupled receptor sequence homolog and diagnostic and
        therapeutic uses thereof for metabolic disorders)
IT
     403067-53-8P
     RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
        (amino acid sequence; protein and cDNA sequences of novel human G
        protein-coupled receptor sequence homolog and diagnostic and
        therapeutic uses thereof for metabolic disorders)
     403067-52-7
                  403067-54-9
IT
     RL: BSU (Biological study, unclassified); DGN (Diagnostic use); PRP
     (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (nucleotide sequence; protein and cDNA sequences of novel human G
        protein-coupled receptor sequence homolog and diagnostic and
        therapeutic uses thereof for metabolic disorders)
IT
     403070-95-1, 4: PN: WO0218579 SEQID: 4 unclaimed DNA
                                                             403070-96-2, 5: PN:
     WO0218579 SEQID: 5 unclaimed DNA 403070-97-3, 6: PN: WO0218579 SEQID: 6
     unclaimed DNA 403070-98-4, 7: PN: WO0218579 SEQID: 7 unclaimed DNA
     403070-99-5, 8: PN: WO0218579 SEQID: 8 unclaimed DNA 403071-00-1, 9: PN:
     WO0218579 SEQID: 9 unclaimed DNA
     RL: PRP (Properties)
        (unclaimed nucleotide sequence; protein and cDNA sequences of a novel
        human G protein-coupled receptor sequence homolog and diagnostic and
        therapeutic uses thereof for metabolic disorders)
L45 ANSWER 9 OF 11 HCAPLUS COPYRIGHT 2005 ACS on STN
     2000:573930 HCAPLUS
ΑN
DN
     133:159935
     Entered STN: 18 Aug 2000
ED
ΤI
     Inhibiting formation of atherosclerotic lesions by reducing adipocyte
     fatty acid binding protein (AFABP)
TN
     Haber, Edgar; Lee, Mu-en; Perrella, Mark A.; Hotamisligil, Gokhan S.
     President and Fellows of Harvard College, USA; Haber, Carol
PΑ
     PCT Int. Appl., 43 pp.
SO
     CODEN: PIXXD2
DT
     Patent
T<sub>1</sub>A
     English
IC
     ICM C12N015-11
         A61K031-7088; A61K039-395; G01N033-68
CC
     1-8 (Pharmacology)
     Section cross-reference(s): 3, 14
FAN.CNT 1
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                         KIND
                                DATE
                                            APPLICATION NO.
                                                                    DATE
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     WO 2000047734
                                            WO 2000-US3560
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PΤ
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         W: AU, CA, JP, US
         RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL,
             PT, SE
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                          AΑ
                                            EP 2000-908604
     EP 1151092
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     JP 2002536459
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PRAI US 1999-119880P
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CLASS
 PATENT NO.
                 CLASS PATENT FAMILY CLASSIFICATION CODES
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                        I CM
                        C12N015-11
 WO 2000047734
                        A61K031-7088; A61K039-395; G01N033-68
                 ICS
 WO 2000047734 ECLA
                        C12N015/11B
   The invention features a method of inhibiting formation of atherosclerotic
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lesions by administering to a mammal, e.g., a human patient who has been identified as suffering from or at risk of developing atherosclerosis, a compound that reduces expression or activity of adipocyte fatty acid binding protein (AFABP or aP2). Inhibiting AFABP expression or activity reduced the development of atherosclerotic lesions despite a high level of serum cholesterol. Mice with a null mutation in the genes for apoE or both apoE and AFABP were used for the study.

ST atherosclerosis inhibition adipocyte fatty acid binding protein; aP2 protein antiatherosclerotic

IT Hypercholesterolemia

(AFABP-deficient mice resistance to; inhibiting formation of atherosclerotic lesions by reducing adipocyte fatty acid binding protein (AFABP))

IT Apolipoproteins

RL: ADV (Adverse effect, including toxicity); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)

(E, gene for, null mutation in; inhibiting formation of atherosclerotic lesions by reducing adipocyte fatty acid binding protein (AFABP))

IT Phosphoproteins

RL: ADV (Adverse effect, including toxicity); BAC (Biological activity or effector, except adverse); BOC (Biological occurrence); BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); OCCU (Occurrence); PROC (Process)

(aP2 (adipocyte protein 2); inhibiting formation of atherosclerotic lesions by reducing adipocyte fatty acid binding protein (AFABP))

IT Adipose tissue

(adipocyte, inhibition of AFABP expression in; inhibiting formation of atherosclerotic lesions by reducing adipocyte fatty acid binding protein (AFABP))

IT Antiarteriosclerotics

(antiatherosclerotics; inhibiting formation of atherosclerotic lesions by reducing adipocyte fatty acid binding protein (AFABP))

IT Antisense DNA

RL: BPR (Biological process); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses) (as inhibitor; inhibiting formation of atherosclerotic lesions by reducing adipocyte fatty acid binding protein (AFABP))

IT Antisense oligonucleotides

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (as inhibitor; inhibiting formation of atherosclerotic lesions by reducing adipocyte fatty acid binding protein (AFABP))

IT Genetic element

RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)

(cis regulatory element, of AFABP, inhibition of; inhibiting formation of atherosclerotic lesions by reducing adipocyte fatty acid binding protein (AFABP))

IT Fatty acids, biological studies

RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)

(complexes, with AFABP, in drug screening; inhibiting formation of atherosclerotic lesions by reducing adipocyte fatty acid binding protein (AFABP))

IT Cell

(expressing AFABP, in drug screening; inhibiting formation of atherosclerotic lesions by reducing adipocyte fatty acid binding protein (AFABP))

IT Artery

(foam cell, inhibition of macrophage differentiation into; inhibiting formation of atherosclerotic lesions by reducing adipocyte fatty acid binding protein (AFABP))

IT mRNA

RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)

(for AFABP, antisense nucleic acid to, as inhibitor; inhibiting

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formation of atherosclerotic lesions by reducing adipocyte fatty acid
        binding protein (AFABP))
     Gene, animal
IT
     RL: ADV (Adverse effect, including toxicity); BSU (Biological study,
     unclassified); BIOL (Biological study)
        (for apoE and AFABP, null mutation in; inhibiting formation of
        atherosclerotic lesions by reducing adipocyte fatty acid binding
        protein (AFABP))
     Fatty acids, biological studies
TΤ
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (in drug screening; inhibiting formation of atherosclerotic lesions by
        reducing adipocyte fatty acid binding protein (AFABP))
ΤТ
     Artery
     Drug screening
     Mammal (Mammalia)
        (inhibiting formation of atherosclerotic lesions by reducing adipocyte
        fatty acid binding protein (AFABP))
IT
     Macrophage
        (inhibition of AFABP expression in; inhibiting formation of
        atherosclerotic lesions by reducing adipocyte fatty acid binding
        protein (AFABP))
IT
     Promoter (genetic element)
     RL: BPR (Biological process); BSU (Biological study, unclassified); THU
     (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
        (macrophage-specific, antisense DNA linked to; inhibiting formation of
        atherosclerotic lesions by reducing adipocyte fatty acid binding
        protein (AFABP))
     Transcription, genetic
        (of AFABP, inhibition of; inhibiting formation of atherosclerotic
        lesions by reducing adipocyte fatty acid binding protein (AFABP))
     Cell differentiation
        (of macrophage into foam cell, inhibition of; inhibiting formation of
        atherosclerotic lesions by reducing adipocyte fatty acid binding
        protein (AFABP))
тт
     57-88-5, Cholesterol, biological studies
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
        (inhibiting formation of atherosclerotic lesions by reducing adipocyte
        fatty acid binding protein (AFABP))
     139817-95-1, 7: PN: WO0047734 SEQID: 1 unclaimed DNA
                                                             140602-12-6
IT
     288106-38-7, 1: PN: WO0047734 SEQID: 2 unclaimed DNA
     RL: PRP (Properties)
        (unclaimed nucleotide sequence; inhibiting formation of atherosclerotic
        lesions by reducing adipocyte fatty acid binding protein (AFABP))
     123505-46-4, Phosphoprotein ALBP (human clone λH-ALBP precursor
IT
     protein moiety reduced)
                               288106-39-8
     RL: PRP (Properties)
        (unclaimed protein sequence; inhibiting formation of atherosclerotic
        lesions by reducing adipocyte fatty acid binding protein (AFABP))
IT
     220264-61-9
                  288067-91-4
     RL: PRP (Properties)
        (unclaimed sequence; inhibiting formation of atherosclerotic lesions by
        reducing adipocyte fatty acid binding protein (AFABP))
              THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE.CNT 9
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L45 ANSWER 10 OF 11 HCAPLUS COPYRIGHT 2005 ACS on STN
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AN
DN
    133:129884
    Entered STN: 10 Aug 2000
ED
    Modulation of the sulfonylurea receptor and calcium in adipocytes for
    treatment of obesity/diabetes, and screening method
    Wilkison, William O.; Zemel, Michael B.; Moustaid-Mousse, Naima
IN
    Zen Bio, Inc., USA; The University of Tennessee Research Corporation
PΑ
    U.S., 17 pp.
SO
    CODEN: USXXAM
DT
    Patent
    English
LΆ
    ICM G01N033-566
ICS G01N033-567
IC
INCL 435007200
CC 1-10 (Pharmacology)
FAN.CNT 1
                              DATE APPLICATION NO.
    PATENT NO.
                      KIND DATE
                                                                DATE
                       A 20000808 US 1999-287907
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                      A
    US 6100047
                                                               19990407
                      B1 20010605 US 2000-592420
    US 6242200
                                         US 2000-592019
    US 6492130
                       B1 20021210
                                                               20000612
                   B1
P
    US 6569633
                              20030527
                                         US 2000-592421
                                                               20000612
PRAI US 1998-81189P
                              19980408
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CLASS
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US 6100047
               ICM
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                ICS
                      G01N033-567
               INCL 435007200
US 6100047
               NCL
                      435/007.200; 435/007.100; 435/007.210
               ECLA G01N033/50D2; G01N033/92
               NCL
ECLA
                      435/007.210; 435/007.100; 435/007.200
US 6242200
                      G01N033/50D2; G01N033/92
                      435/014.000; 435/007.210; 435/026.000
US 6492130
               NCL
               ECLA G01N033/50D2; G01N033/92
US 6569633
                NCL
                      435/007.210; 435/007.100; 435/007.200
                ECLA
                      G01N033/50D2; G01N033/92
    Methods are provided for identifying compds. and compns. useful in the
AΒ
    regulation of weight, the treatment of obesity, diabetes and other insulin
    resistance-related disorders hypertension, cardiovascular disease, etc.
    The methods comprise the use of adipocytes and preadipocytes in assays and
    screens for compds. or compns. of interest. The invention recognizes the
    presence of the sulfonylurea receptor in adipocytes and its utility in
    identifying compds. and in treating obesity and other insulin
    resistance-related disorders. The methods of the invention also provide
    for identifying novel calcium channels or other calcium regulatory
    channels that are selectively expressed in human adipocytes as compared to
    human preadipocytes and for screening adipocytes for compds. that
    selectively antagonize calcium. These compds. may be used in the
    treatment of obesity and diabetes and other insulin resistance-related
    disorders. Once identified, the compds. of the invention can be used in
    pharmaceutical compns. for the treatment of insulin resistance-related
    disorders and to regulate lipogenesis and lipolysis.
    sulfonyl receptor modulation adipocyte obesity diabetes drug screening;
ST
    calcium channel adipocyte obesity diabetes drug screening; insulin
    resistance disorder drug screening; hypertension cardiovascular disease
    drug screening; lipogenesis lipolysis drug screening
IT
    Gene, animal
    RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
       (SUR1; sulfonylurea receptor and calcium modulation in adipocytes for
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treatment of obesity/diabetes, and screening method)

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Adipose tissue
TT
        (adipocyte; sulfonylurea receptor and calcium modulation in adipocytes
        for treatment of obesity/diabetes, and screening method)
     Ion channel blockers
IT
        (calcium; sulfonylurea receptor and calcium modulation in adipocytes
        for treatment of obesity/diabetes, and screening method)
IT
     Biological transport
        (influx; sulfonylurea receptor and calcium modulation in adipocytes for
        treatment of obesity/diabetes, and screening method)
     Lipids, biological studies
     RL: BPR (Biological process); BSU (Biological study, unclassified); MFM
     (Metabolic formation); BIOL (Biological study); FORM (Formation,
     nonpreparative); PROC (Process)
        (lipogenesis; sulfonylurea receptor and calcium modulation in
        adipocytes for treatment of obesity/diabetes, and screening method)
ΙT
     Lipids, biological studies
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (lipolysis; sulfonylurea receptor and calcium modulation in adipocytes
        for treatment of obesity/diabetes, and screening method)
     Antidiabetic agents
TΤ
     Antiobesity agents
     Drug screening
        (sulfonylurea receptor and calcium modulation in adipocytes for
        treatment of obesity/diabetes, and screening method)
IT
     Calcium channel
       Glycerides, biological studies
     Potassium channel
     Sulfonylurea receptors
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (sulfonylurea receptor and calcium modulation in adipocytes for
        treatment of obesity/diabetes, and screening method)
     9004-10-8, Insulin, biological studies 9045-77-6, Fatty acid synthase
TТ
     9075-65-4, Glycerol-3-phosphate dehydrogenase
     RL: BAC (Biological activity or effector, except adverse); BPR (Biological
     process); BSU (Biological study, unclassified); BIOL (Biological study);
     PROC (Process)
        (sulfonylurea receptor and calcium modulation in adipocytes for
        treatment of obesity/diabetes, and screening method)
IT
     364-98-7, Diazoxide 11024-24-1, Digitonin
     RL: BAC (Biological activity or effector, except adverse); BSU (Biological
     study, unclassified); BIOL (Biological study)
        (sulfonylurea receptor and calcium modulation in adipocytes for
        treatment of obesity/diabetes, and screening method)
     10238-21-8, Glibenclamide 21829-25-4, Nifedipine
IT
     RL: BAC (Biological activity or effector, except adverse); BSU (Biological
     study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES
     (Uses)
        (sulfonylurea receptor and calcium modulation in adipocytes for
        treatment of obesity/diabetes, and screening method)
     50-99-7, D-Glucose, biological studies 56-81-5, 1,2,3-Propanetriol,
TΤ
                         60-92-4
                                    7440-70-2, Calcium, biological studies
     biological studies
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (sulfonylurea receptor and calcium modulation in adipocytes for
        treatment of obesity/diabetes, and screening method)
              THERE ARE 40 CITED REFERENCES AVAILABLE FOR THIS RECORD
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L45 ANSWER 11 OF 11 HCAPLUS COPYRIGHT 2005 ACS on STN
AN
     1999:454261 HCAPLUS
DN
     131:98053
     Entered STN: 26 Jul 1999
ED
     Methods and compositions for treating and diagnosing insulin related
     disorders using insulin-derived polypeptides
IN
     Duckworth, William Clifford; Hamel, Frederick G.
PA
     PCT Int. Appl., 99 pp.
SO
     CODEN: PIXXD2
DT
     Patent
LΑ
     English
     ICM C07K014-62
IC
     ICS G01N033-68
CC
     2-6 (Mammalian Hormones)
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              AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
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              FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
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PRAI US 1998-70821P
WO 1999-US471
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CLASS
PATENT NO. CLASS PATENT FAMILY CLASSIFICATION CODES
PATENT NO.
                    _____
           ICM
                     C07K014-62
WO 9935169
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                     C07K014/62
    The present invention relates to methods and compns. for treating or
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The present invention relates to methods and compns. for treating or reducing the symptoms of a disorder of absolute or relative insulin deficiency, severe insulin resistance, of lipid accumulation or excess lipid synthesis, or of protein catabolism or degradation. A preferred method of treating or reducing symptoms of such a disorder includes administering a polypeptide that includes a sequence flanking an insulin degrading enzyme cleavage site of insulin. Such peptides preferably inhibit one or more activities of the complex of insulin degrading enzyme and multicatalytic proteinase. The invention also includes methods for detecting and for assessing treatments of such disorders based on measuring the activity of a complex between insulin degrading enzyme and multicatalytic proteinase.

ST insulin related disorder treatment diagnosis insulin derived polypeptide; multicatalytic proteinase insulin degrading enzyme complex inhibition

IT Muscle, disease

(atrophy; treatment and diagnosis of chronic wasting disease using insulin-derived polypeptides that inhibit the activity of the complex between insulin degrading enzyme and multicatalytic proteinase)

IT Diagnosis

(diabetes mellitus; treatment and diagnosis of insulin-related disorders using insulin-derived polypeptides that inhibit the activity of the complex between insulin degrading enzyme and multicatalytic proteinase)

IT Lipids, biological studies

RL: BSU (Biological study, unclassified); MFM (Metabolic formation); BIOL (Biological study); FORM (Formation, nonpreparative)

(formation; treatment and diagnosis of disorders involving excess lipid accumulation using insulin-derived polypeptides that inhibit the activity of the complex between insulin degrading enzyme and multicatalytic proteinase)

IT Heart, disease

(infarction; treatment and diagnosis of myocardial infarction using insulin-derived polypeptides that inhibit the activity of the complex between insulin degrading enzyme and multicatalytic proteinase)

IT Diabetes mellitus

(non-insulin-dependent; treatment and diagnosis of insulin-related disorders using insulin-derived polypeptides that inhibit the activity of the complex between insulin degrading enzyme and multicatalytic proteinase)

IT Injury

(trauma; treatment and diagnosis of severe stress using insulin-derived polypeptides that inhibit the activity of the complex between insulin degrading enzyme and multicatalytic proteinase)

IT AIDS (disease)

Anti-AIDS agents

Neoplasm

(treatment and diagnosis of chronic wasting disease using insulin-derived polypeptides that inhibit the activity of the complex between insulin degrading enzyme and multicatalytic proteinase)

IT Protein degradation

(treatment and diagnosis of disorders involving protein degradation using insulin-derived polypeptides that inhibit the activity of the complex between insulin degrading enzyme and multicatalytic proteinase)

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Antidiabetic agents
     Antiobesity agents
     Diagnosis
     Drug screening
        (treatment and diagnosis of insulin-related disorders using
        insulin-derived polypeptides that inhibit the activity of the complex
        between insulin degrading enzyme and multicatalytic proteinase)
     Cardiovascular agents
TТ
        (treatment and diagnosis of myocardial infarction using insulin-derived
        polypeptides that inhibit the activity of the complex between insulin
        degrading enzyme and multicatalytic proteinase)
TΨ
     Starvation, animal
     Stress, animal
        (treatment and diagnosis of severe stress using insulin-derived
        polypeptides that inhibit the activity of the complex between insulin
        degrading enzyme and multicatalytic proteinase)
        (wasting; treatment and diagnosis of chronic wasting disease using
        insulin-derived polypeptides that inhibit the activity of the complex
        between insulin degrading enzyme and multicatalytic proteinase)
     9004-10-8, Insulin, biological studies
TΤ
     RL: ADV (Adverse effect, including toxicity); BIOL (Biological study)
        (resistance; treatment and diagnosis of insulin-related disorders using
        insulin-derived polypeptides that inhibit the activity of the complex
        between insulin degrading enzyme and multicatalytic proteinase)
                  144775-20-2
IT
     99542-45-7
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (substrate sequence adjacent to the cleavage site for insulinase;
        treatment and diagnosis of insulin-related disorders using
        insulin-derived polypeptides that inhibit the complex between insulin
        degrading enzyme and multicatalytic proteinase)
     9013-83-6D, Insulin degrading enzyme, complexes with multicatalytic
TΤ
                  140879-24-9D, Multicatalytic proteinase, complexes with
     proteinase
     insulin degrading enzyme
     RL: BAC (Biological activity or effector, except adverse); BPR (Biological
     process); BSU (Biological study, unclassified); BIOL (Biological study);
     PROC (Process)
        (treatment and diagnosis of insulin-related disorders using
        insulin-derived polypeptides that inhibit the activity of the complex
        between insulin degrading enzyme and multicatalytic proteinase)
     9004-10-8, Insulin, biological studies 9004-10-8D, Insulin, polypeptides, that include a sequence flanking an insulin degrading enzyme
     cleavage site, biological studies 111479-48-2 230647-03-7
     230647-04-8
                  230647-05-9
     RL: BAC (Biological activity or effector, except adverse); BSU (Biological
     study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES
     (Uses)
        (treatment and diagnosis of insulin-related disorders using
        insulin-derived polypeptides that inhibit the activity of the complex
        between insulin degrading enzyme and multicatalytic proteinase)
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